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A. I. A. FILE No. 22C

ALBERENE STONE



*for Acid-Alkali
Flame-and Moisture-Proof*

**Laboratory
Equipment**

Special Purpose Tanks

**Toilet, Urinal and
Shower Partitions**

Stair Treads

**Central and Sub-Station
Construction**

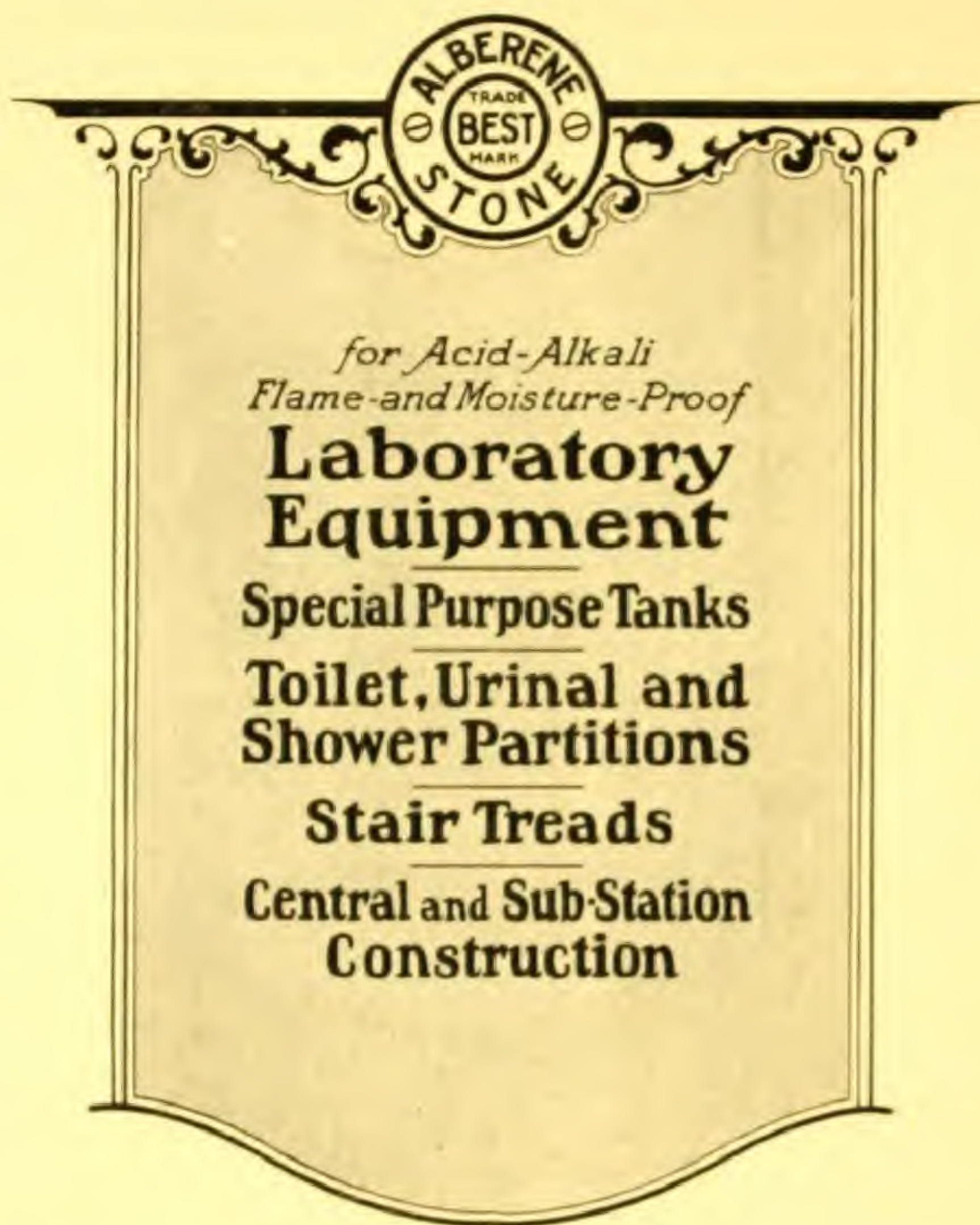


A Natural Stone
Quarried for Over 40 Years

**ALBERENE
STONE
COMPANY**



ALBERENE STONE



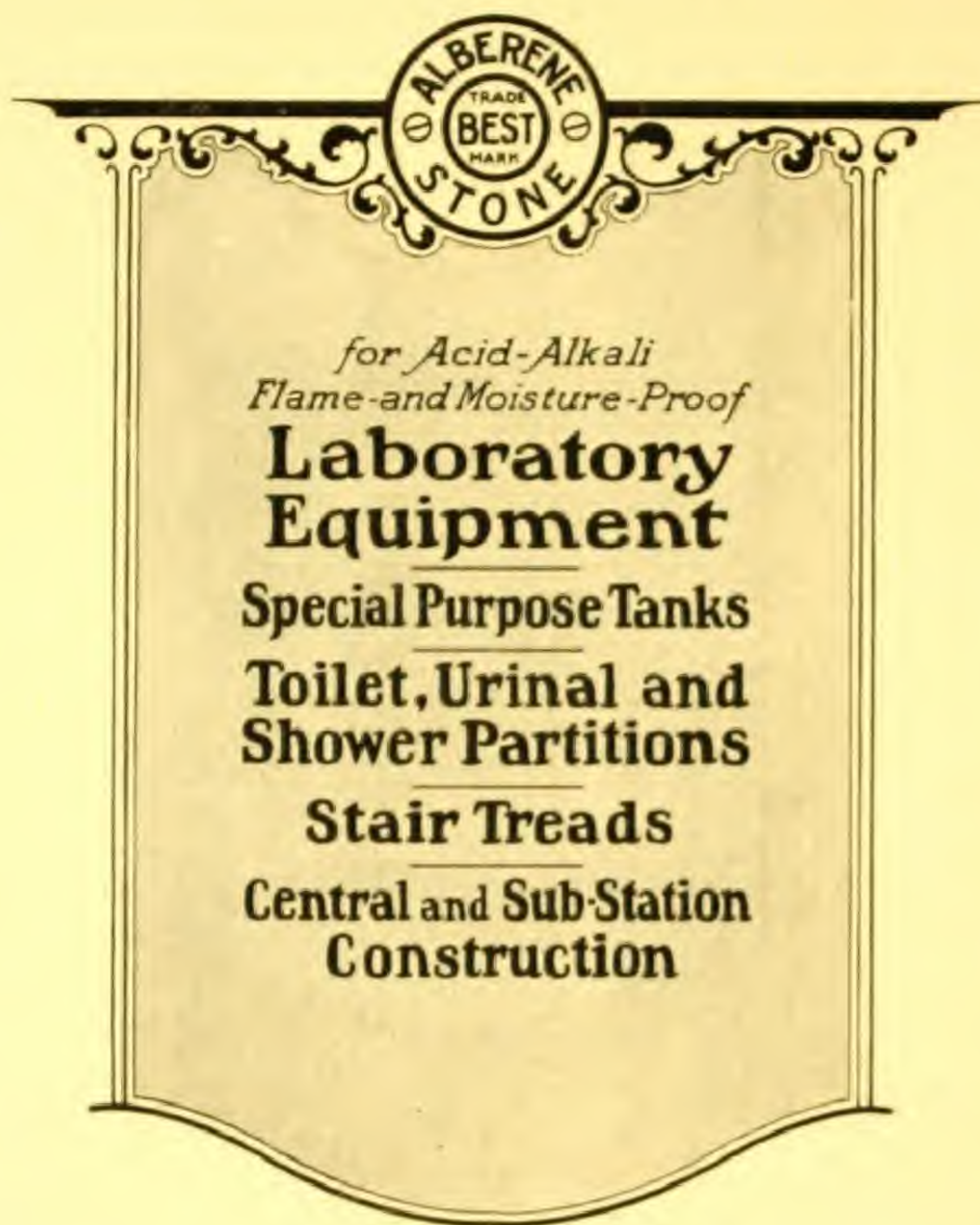
ALBERENE STONE COMPANY

153 WEST 23rd. STREET, NEW YORK



MAR 19 1915

ALBERENE STONE



ALBERENE STONE COMPANY

153 WEST 23rd. STREET, NEW YORK



ALBERENE STONE COMPANY

Main Office

153 West 23rd Street, New York City

Quarries at Schuyler, Virginia

Boston Branch and Factory

35-37 Stillings Street, Boston, Mass.

Chicago Branch and Factory

1700 Elston Avenue, Chicago, Ill.

Pittsburgh Office

617 Ferguson Building, Pittsburgh, Pa.

Newark Office

12 E. Park Street, Newark, N. J.

Philadelphia Office

1511 Walnut Street, Philadelphia, Pa.

Buffalo Office

732 Brisbane Bldg., Buffalo, N. Y.

Cleveland Office

303 Chester—12th Bldg., Cleveland, Ohio

Richmond Office

703 Grace American Bldg., Richmond, Va.

Other Offices

Baltimore, Maryland St. Louis, Missouri

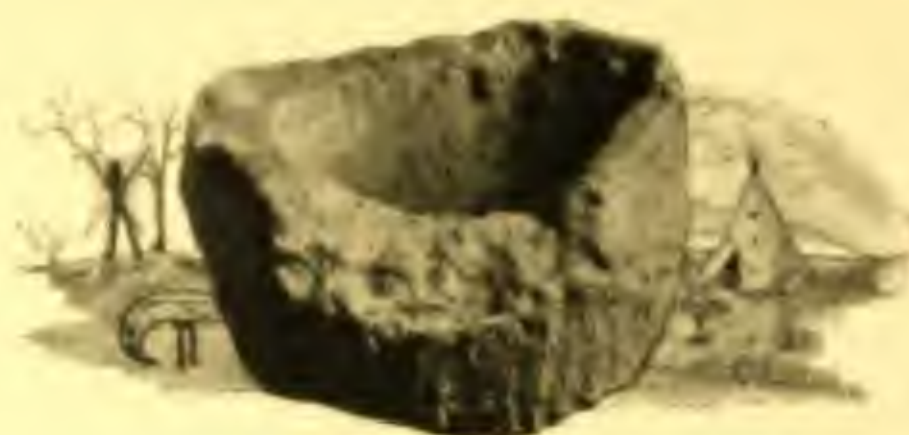
The Story of Alberene Stone.



HERE was located and opened in Albemarle County, Virginia, in the late 70's and the early 80's of the last century, a deposit of stone of peculiar and remarkable qualities. It was weather-proof, heat-proof, time-proof and easily worked—as was proved by Indian bowls and other utensils carved from this material with the crude tools of the early aborigines and to be seen today in public museums and private collections. While soft enough to be easily shaped and fabricated, it yet was so dense and close-grained as to have a crushing strength equal to that of granite—beside being non-absorbent. And, in chemical characteristics, it was acid-proof and alkali-proof.

A Product
with a
Long
History

The pioneer in opening and developing this deposit was Mr. John G. Porter, who early saw the commercial possibilities of a material possessing all these unique qualities. Thoroughly convinced of the large potential markets in the industrial, architectural and scientific worlds, he associated himself with a number of men in an organization which later became known as the Alberene Stone Company, with Mr. D. J. Carroll as president. And this material has been quarried and marketed continuously for more than 40 years by this organization under the name "Alberene Stone."

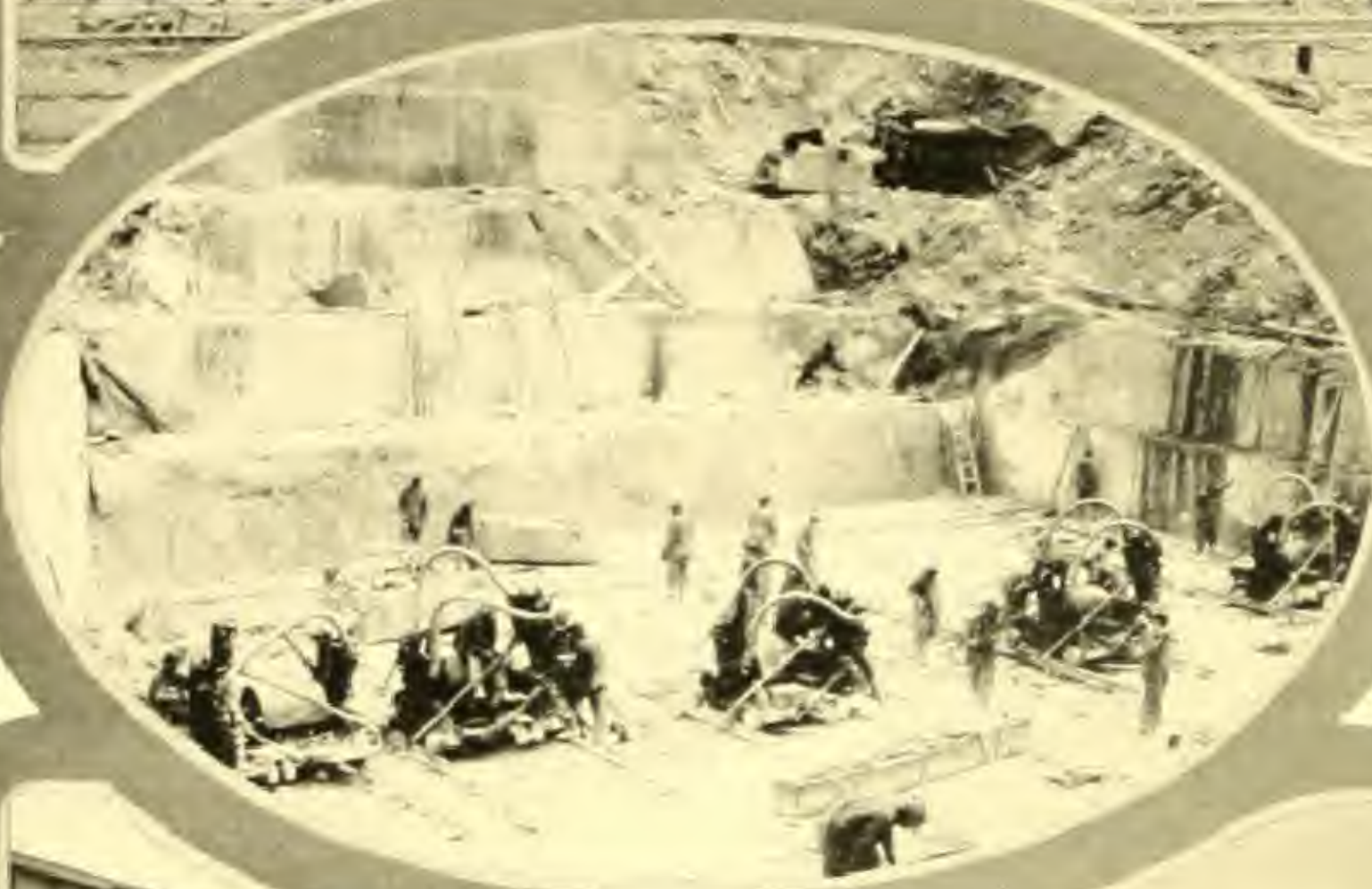


*An Indian cooking pot of
Alberene Stone — one of
many from the Alberene
Stone Company's collec-
tion.*

"Alberene" is a name coined from the name of the county (Albemarle) in Virginia where the deposit lies, and from the name of one of the pioneers in its development, Mr. Serene. The original small holdings were increased by the repeated acquisition of other properties along the vein, until today the entire deposit of this exclusive material is owned by the Alberene Stone Company, which quarries it by what is conceded to be the most modern quarry plant in the country and finishes it in its many marketable forms in mills completely equipped with special modern machinery, at Schuyler, Va. Supplementing this are three large branch factories at Boston, New York and Chicago, completely stocked and equipped and with direct rail connections—important factors in the service this company renders.

The only known deposit of Alberene Stone is this vein, originally opened in Albemarle County and since found to extend into Nelson County adjoining—approximately five miles in length, of varying widths up to 200 feet, and of unknown depth. Sufficient material is in sight to supply all requirements

The Source
of
Alberene
Stone



Some of the Alberene Stone quarries at Schuyler, Va. Electric power is largely used throughout, and the equipment is modern and efficient.

Powerful channelers and undercutters cut out the stone in massive blocks.



The quarried blocks are sent to the storage yards at the mills, and stacked until the saws are ready for them.

for Alberene Stone for several hundred years, even at the present rapidly increasing rate of demand.

The present holdings of the company comprise over 6,000 acres of land. And the unique and distinctive characteristics of Alberene Stone, combined with the activities of the company, have made these Virginia quarries the source of probably 95 per cent of the natural stone used for the general purposes recognized by all those qualified to judge of quality.

Many deposits of so-called "similar" stone have been prospected, but not one has ever been located having either the characteristics or the extent of the Alberene Stone vein. It is a remarkable tribute to the merits of Alberene Stone to be able to say, with truth, that—in this "age of substitution"—no other natural stone, nor any artificial material, combines so many qualities essential for the performance of certain definite and important functions in the fields of industry, science and architecture.

In the laboratories of colleges, research institutions and industrial plants everywhere, it is helping in education, in investigation and experiment, in the betterment of processes and in the maintenance of standards. In hospitals and scientific institutions, it lends its aid in the laboratory processes by which health is conserved and pure foods assured. In electrical construction it provides safety for men and equipment. In the sanitary work in buildings of every description, it is safeguarding health and at the same time providing the maximum of durability. And countless thousands of scholars, students and workers daily go to and from their duties in safety, over stair treads and landings of Alberene Stone.

Turning now for a moment to technicalities, Alberene Stone is found to belong to that general family of rocks of which talc is probably the most popularly known member. Even as a family, however, these rocks show so wide a variation in composition and in chemical and physical properties, that relationship is often extremely hard to trace. And the more valuable "family characteristics" are too often—with many of the members—completely hidden by less desirable qualities in the individual. Alberene Stone seems to be that happy child of nature in which the best is concentrated and the less fortunate traits eliminated.

Geological Classification

Alberene Stone is, geologically speaking, a steatite—but it is a steatite of absolutely unique and exclusive characteristics possessed, as a group, by no other natural stone or any artificial material. It has nothing in common with the talcs, or other prepared or treated materials. It is a natural product, ages in the making and used as it comes from Nature's laboratory—quarried in blocks, sawed into slabs of various thicknesses, and fabricated in units of convenient form and size—without crushing, grinding, burning, or other processing to change its natural characteristics. In fact, it is in these natural characteristics—unchanged and unchangeable—that its many great values lie.

**What It
Is Used for**

Without attempting to give a complete listing of all the applications of Alberene Stone, the following will indicate the purposes for which it is most largely used:

Architectural Applications

Sanitary Equipment
Toilet Partitions
Shower Compartments and Dressing Rooms
Stair Treads and Landings
Plinths, Door and Window Sills, Trim

Fire Place Linings, Range Hearths and Backs
Wainscoting, Bases
Flooring
Laundry Tubs and Kitchen Sinks

Chemical, Physical and Other Laboratories

Table Tops
Sinks and Tanks
Fume Hoods and Ducts
Shelving, Cabinets, Peg Boards

Flooring and Bases
Germination Tanks
Soil Testing Equipment

Hospital Applications

X-Ray Developing Room Equipment
Cardiograph Developing Room Equipment
Media Room Equipment
Animal Inoculation Rooms
Animal Kennels (all stone)
Animal Operating Room Equipment

General Chemical Laboratory Equipment
Nurses' Training Laboratory Equipment
Private Research Laboratory Equipment
Bacteriological Research Laboratory Equipment
Pathological Research Laboratory Equipment
Pharmacists' Room Equipment

Electrical Applications

Switchboards, Barriers, Bases
Insulating Floor Slabs or Tiles
Rheostat Tops and Bases

Bus Bar Supports
Battery Room Flooring
Oil Switch Compartments

Flooring—Sanitary and Chemical-Resisting

Acid Refining Rooms
Acid and Chemical Storage Rooms
Battery Rooms
Salt and Pickle Factory Workrooms

Animal Inoculation Rooms (flooring, base, wainscoting)
Dangerous Chemical Storage (flooring, shelving, sheathing, bases)

Miscellaneous Applications

Lining Blocks for Paper Mill Furnaces
Oven Floors and Grates
Fireless Cookers, Griddles, etc.
Snow Melters
Acid and Chemical Receptacles

Steam Baths
Gas Burner Tips
Silk Dyeing Jigs
Cabinet Work and Shelving (acid-resisting)

**Its Physical
Character-
istics and
Advantages**

For the purposes above mentioned, Alberene Stone affords the following very important advantages:

- a—It is a dense, close-grained, massive rock with practically no stratification or natural cleavage lines.
- b—It is therefore free from any tendency to split, flake, chip or spall, either under normal service or under excessive heat.
- c—For the same reasons, it lends itself perfectly to the processes of tonguing, grooving, slotting, boring and milling used in machining and assembling the slabs or blocks into fabricated forms. No other natural stone can be worked in like manner and retain the sharp corners and smooth edges which permit the close-fitting, unchipped, liquid-tight joints distinctive of Alberene Stone Construction.
- d—It is so dense as to be practically non-absorbent—repeated tests showing an absorption, by weight, of only a fraction of 1% of moisture. And as this is only a mere surface penetration, it quickly dries off.
- e—Because of its non-absorbent qualities, combined with chemical inertness making it acid-and-alkali-resistant, it is practically non-staining. Slight stains that may occur are on the surface only and are easily removed by sand-papering, sandstone rubbing, or carborundum honing.
- f—It has a high tensile strength and high resistance to crushing. (See tests, page 7.)
- g—It is fire-proof—yielding only to the intense heat of the electric arc.
- h—Its color is a pleasing light gray, reflecting light freely, yet not showing dirty marks.
- j—It is susceptible to a smooth surface finish which makes cleaning easy.
- k—Because of its ease of accurate machining, it can be assembled in fabricated forms having the strength and solidity of a solid unit.
- l—Its great mechanical and dielectric strength, its uniform texture, and its freedom from metallic veins, recommend it for switchboard panels, switch bases, barriers, insulating floor panels, etc.
- m—Its chemical inertness, even at high temperatures in the presence of acid or alkali fumes, explains its wide use as a material for furnace linings.

The "regular" grade of Alberene Stone is softer than the "hard" stone—a characteristic recommending it for all purposes where the material must be machined for interlocking joints and fabricated into built-up structures of stone slabs. This "regular" stone is that used in laundry tubs, toilet partitions, shower stalls, wainscoting, toilet work of all kinds, sinks, shelving, fume hoods, etc.

Two Grades
Are
Marketed

The "hard" grade of Alberene Stone contains a percentage of hard silicious material making it a splendid material for stair-treads, stair landings, floor slabs, table tops, hood bases, etc. It has a durability not surpassed by any other natural stone, combined with easy machining to any desired size and thickness. The finished rubbed faces of stair treads have a natural "toothed" surface with a pronounced non-slipping quality. Treads or landings will not crack even under the action of flame.

In order to secure authoritative facts on the properties of Alberene Stone, samples of the average run-of-quarry stone—graded only as "regular" and "hard"—were submitted to testing laboratories. The results are briefly summarized here.

Some
Scientific
Tests

Tensile Strength—Mellon Institute Tests

	Regular	Hard
Maximum—lbs. per sq. in.	959	1180
Minimum—lbs. per sq. in.	765	1005
Average —lbs. per sq. in.	872	1094

Transverse Strength—Mellon Institute Tests

Samples 4 in. x 14 in. x 2 in. thick	
Maximum—lbs. per sq. in.	1910
Minimum—lbs. per sq. in.	1780
Average —lbs. per sq. in.	1840

Samples 4 in. x 14 in. x 1½ in. thick	
Maximum—lbs. per sq. in.	1120
Minimum—lbs. per sq. in.	1050
Average —lbs. per sq. in.	1086

Samples 4 in. x 14 in. x 1¼ in. thick	
Maximum—lbs. per sq. in.	660
Minimum—lbs. per sq. in.	640
Average —lbs. per sq. in.	650

Moisture Absorption Qualities

Test by Electrical Testing Laboratories

Sample	Thickness	Original Weight	After Baking 3 hrs. at 150° C.		After Exposing to air 18 hr.		After Soaking 1 hour	
			Weight	%	Weight	%	Weight	%
Alberene, reg.	1¼ in.	74.788	74.675	99.85	74.772	99.98	74.790	100.00
"	hard 1¼ in.	69.985	69.960	99.96	69.965	99.97	70.003	100.03
"	reg. 1½ in.	51.902	51.880	99.95	51.888	99.97	51.910	100.01
"	hard 1½ in.	75.370	75.347	99.97	75.358	99.98	75.397	100.04
"	reg. 2 in.	86.809	86.778	99.96	86.788	99.98	86.855	100.05
"	hard 2 in.	54.104	54.087	99.97	54.092	99.98	54.137	100.06

Chemical Composition

Silica	41.75
Magnesia	25.56
Protoxide of Iron	14.04
Alumina	4.80
Lime	4.19
Water of Composition	10.22
	100.56

ALBERENE STONE COMPANY



Grouped 'round the Alberene Stone Company's quarry and mill activities are the lives of an entire community—for the health, happiness and contentment of which the Company has held itself responsible for more than a generation.

- | | |
|--|---|
| 1—One of the Company's boarding houses. | 6—One of the schools for the Company's employees. |
| 2—Interior of the general store. | 7—One of the several churches. |
| 3—The hotel that shelters visitors. | 8—The hospital that serves the community. |
| 4 and 5—Hydro-electric and Diesel-electric plants supplying light and power. | |

ALBERENE STONE Laboratory Equipment

For Industrial, Educational and Research Institutions

*Tables
and Sinks*

*Flooring
and Trim*

*Fume
Hoods*

*Drain
Boards*

*Reagent
Shelving*

*Baths
and Tanks*



Laboratory of the U. S. Department of Agriculture, Washington, D. C., one of over fifty Government installations of Alberene Stone over a period of 20 years.

Seedling Chemistry Laboratory of Yale University, erected in 1922 at a cost of over \$1,500,000. Delano and Aldrich, New York City, Architects.

Baker Chemistry Laboratory of Cornell University, completed in 1923 and costing over \$1,500,000. Gibbs and Walz, Ithaca, N. Y., Architects.

ALBERENE STONE is the STANDARD MATERIAL for laboratory table tops, sinks, fume hoods and similar equipment. It is the only permanently satisfactory material for the purpose. A natural stone chemically inert and highly resistant to acids and alkalis, it is capable of being sawed, shaped and fabricated in any desired form, without chipping or spalling. It is wear-proof, heat-proof, moisture-proof—in short, it has every desirable characteristic for laboratory service. Yet Alberene Stone equipment costs no

more than substitutes which can only be partially satisfactory. In fact, there is no substitute for Alberene Stone in laboratory work.

Alberene Stone has been used for laboratory purposes to such an extent that it may be said that 90 per cent of the good laboratories built in the past 20 years have used this material. A partial list of installations on one of the following pages is indicative of the recognition this material has received.

In the design and furnishing of a laboratory the

layout of tables, sinks, fume hoods, including enameled steel or wood cabinets, pipe supports, and other fixed equipment must be scientifically planned before anything else can be done. Such equipment is always built to fit the particular needs; and this company is prepared to furnish both stonework and the supporting structure.

Our Advisory Assistance In the Design of a Laboratory

Because of the importance of Alberene Stone in the planning of a laboratory we have, through years of specialized experience, acquired a fund of knowledge on laboratory design which we believe to be without an equal. Our engineers are regularly invited to advise with chemical executives and architects on the planning of the laboratory layout for any work they may have. This service is rendered freely, and without cost or obligation.

We have been intimately associated with the latest developments in laboratory planning and bring to you a knowledge of the best ideas used in the notable modern laboratories.

Distinctive Qualities For Laboratory Purposes

The dense, close-grained, practically non-stratified structure of Alberene Stone permits accurate machining for any desired purpose, without splitting or chipping or spalling. Thus, with this material, it is possible to make the liquid-tight, gas-tight, germ-proof joints so essential in laboratory construction. Its distinctive physical structure also makes Alberene Stone practically non-absorbent and non-staining. If surface discolorations occur, they are easily removed by sanding or honing, and the surface of the stone is not impaired. The color is a pleasing light gray, without any glare.

Alberene Stone is chemically inert and therefore highly resistant to both acids and alkalis. The finish is honed smooth and the surface is easily kept clean. The surface does not chip or flake or crack, leaving irregularities for the collection of foreign matter.

In fire-resistant qualities, Alberene Stone is without a peer. Not only is it unaffected by any temperature less than that of the electric arc, but sudden temperature changes, such as a bath of cold water on highly heated stone, have absolutely no injurious effects. Even a combination of high temperature and corrosive fumes—which would break down any other material—does not affect Alberene Stone.

Laboratory equipment of this material is permanent, in the true sense. Its first cost is the only cost—there are no after-costs. Its purchase is an investment in economy and serviceability.

Some Construction Details

The easy "machine-ability" of Alberene Stone permits its fabrication and assembly in structures of the utmost rigidity and durability. Joints are permanently tight, and methods of assembly are used in which no metal is exposed to corrosion. Yet the construction is such that this equipment can be taken down, moved and reassembled (if necessary) without injury.

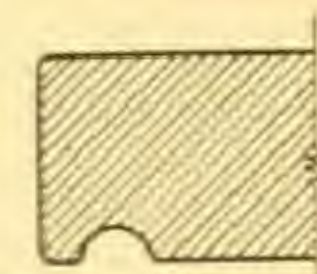


Detail of slip-tongue joint for table tops.

In table tops a slip-tongue joint is used (see detail illustration) in which a strip of non-corrosive metal is bedded in acid-proof cement in grooves in the

slabs, the abutting edges being ground true. The resulting joint is permanent and scarcely perceptible. Another detail is the use of a drip groove (see sketch) along the table edge.

Liquid which may run over the edge stops at the bead and drops thence to the floor, instead of running under to attack and stain the cabinet work beneath.



Detail of drip groove used on table tops.

In fume hoods, sinks, tanks and the like, a tongue-and-groove joint with hidden bolts is used (sketched herewith). A special permanent cement binds the joint and fills the recesses over sunken bolt heads and nuts. Assemblies with this construction have the strength, solidity and tightness of one-piece units.



Detail of tongue-and-groove joint.

Note:—It is obvious that strong and rigid supports are a prime essential for Alberene Stone laboratory equipment. This company, therefore, cannot assume responsibility for the products it supplies unless given an opportunity to pass upon and to approve

the style and design of the supporting structures to be used in connection therewith.

Some Laboratory Applications

Alberene Stone has proved its unquestioned superiority, in laboratories everywhere over a period of more than 20 years, for the following laboratory purposes:

Table Tops and Backs	Baths and Vats
Reagent Shelving	Fume Hoods
Peg Boards	Flooring and Base
Sinks and Tanks	Moisture-proof Cabinets
Drainboards	Chemical Storage Rooms



U. S. Mint, Denver, Colorado: table tops, shelving, floor and base of Alberene Stone.



Laboratory of Crucible Steel Co., Harrison, New Jersey.



The Pompeian Company's Laboratory, Baltimore, Md.



The Geophysical Laboratory of Carnegie Institute, Washington, D. C.



U. S. Mint, San Francisco: part of the Alberene Stone Switchboard for electrolytic refinery control.

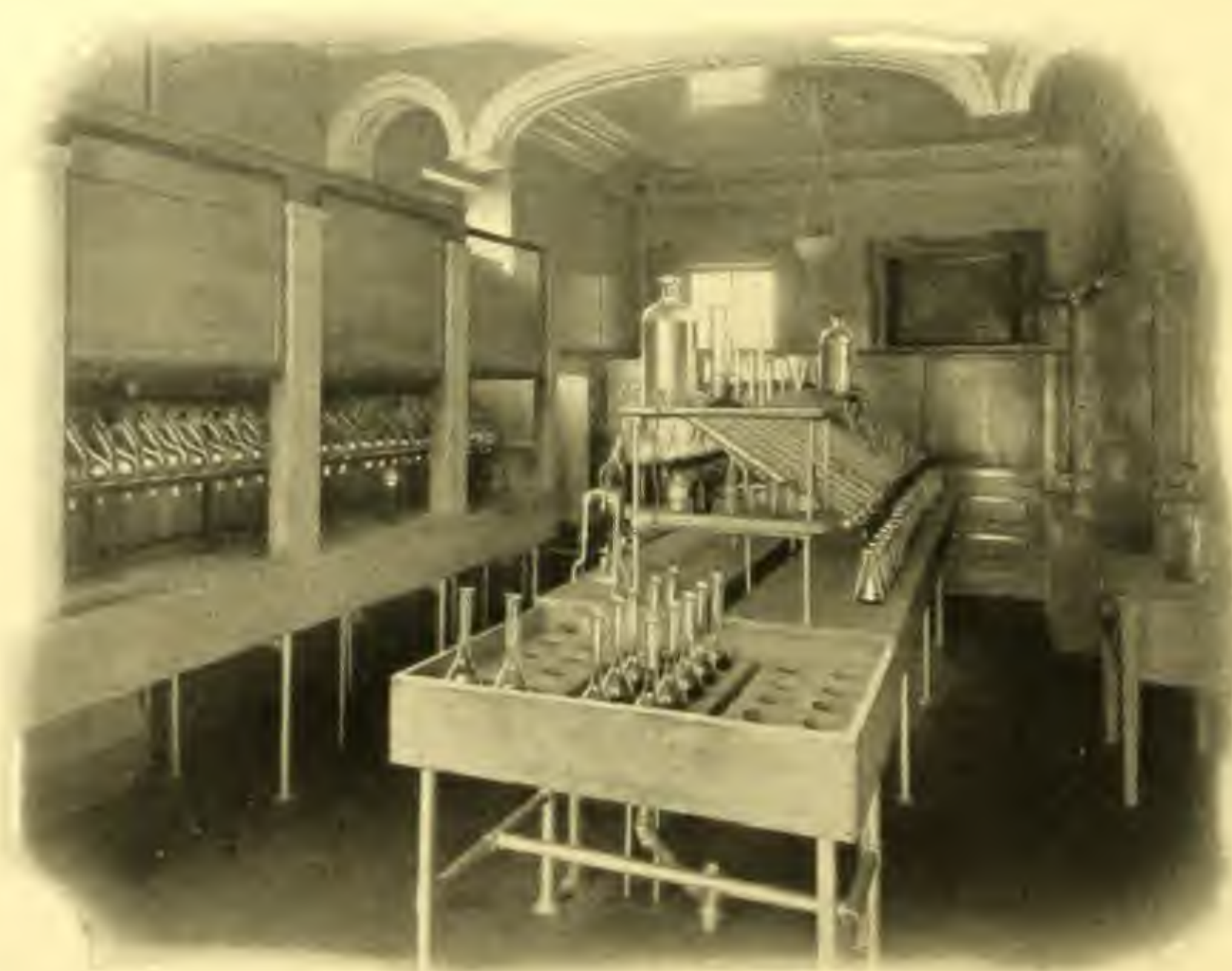
Some Representative Installations

The following partial list of installations of Alberene Stone Laboratory Equipment made by this company in the educational, scientific and industrial fields, suggests the wide-spread approval which this material has earned at the hands of technical men, architects and engineers.

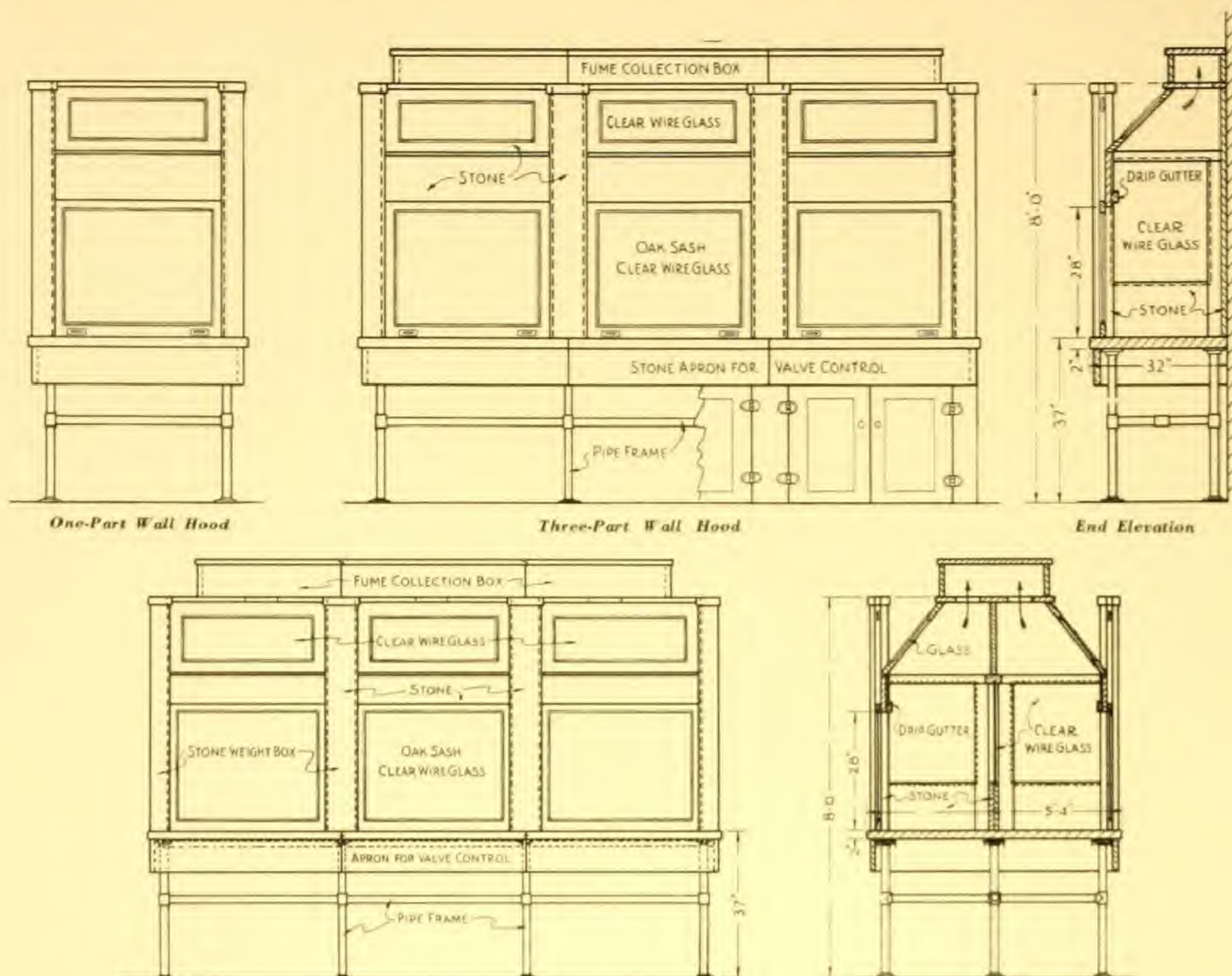
Aluminum Company of America, New Kensington, Pa.
American Sugar Refining Co., New York City and Baltimore, Md.
Astoria Light, Heat & Power Co., Astoria, N. Y.
Babies' & Children's Hospital, Cleveland, Ohio
Baltimore & Ohio R. R., Baltimore, Md.
The Barrett Company, Frankfort, Pa., Detroit, Mich., Youngstown, Ohio, Toledo, Ohio, Bethlehem, Pa., and Edgewater, N. J.
Bellevue Hospital, New York City
Bethlehem Steel Company, Bethlehem, Pa.
Boston College, Boston, Mass.
Brooklyn Edison Company, Brooklyn, N. Y.
Brown University, Providence, R. I.
Catholic University of America, Washington, D. C.
Cheney Bros., So. Manchester, Conn.
Chester County Hospital, West Chester, Pa.
Chicago University, Chicago, Ill.
Colonial Steel Company, Colona, Pa.
Columbia University, New York City
Cornell University, Ithaca, N. Y.
Crucible Steel Company, Harrison, N. J. and Pittsburgh, Pa.
E. I. duPont de Nemours Company, Wilmington, Del.
Federal Reserve Bank, New York City
Fifth Avenue Hospital, New York City
Fleischman Laboratories, New York City
General Chemical Company, Bayonne, N. J., Laurel Hill, N. J., Newell, Pa.
General Electric Company, Harrison, N. J.
Goodyear Tire and Rubber Company, Akron, Ohio
Hills Bros. Company, Brooklyn, N. Y.

Hospital for Joint Diseases, New York City
Jefferson Medical College, Philadelphia, Pa.
Johns Hopkins University, Baltimore, Md.
Jones & Laughlin Steel Co., Pittsburgh, Pa.
Lackawanna Railroad Company, Scranton, Pa.
Arthur D. Little, Inc., Cambridge, Mass.
Loose-Wiles Biscuit Company, Long Island City, N. Y.
Magnetic Pigment Co., Trenton, N. J.
Massachusetts Institute of Technology, Cambridge, Mass.
Maternity Hospital, Cleveland, Ohio.
Mellon Institute of Industrial Research, Pittsburgh, Pa.
Merck and Company, Rahway, N. J.
Mt. Sinai Hospital, New York City
National Biscuit Company, New York City
National Car Wheel Company, Hays, Pa.
National Sugar Refining Company, Long Island City
New Jersey Zinc Company, Palmerton, Pa.
New York University, New York City
New York State Board of Health, Albany, N. Y.
Northwestern University, Evanston, Ill.
Ohio State University, Columbus, Ohio
Pennsylvania Railroad, Altoona, Pa.
Pratt Institute, Brooklyn, N. Y.
Princeton University, Princeton, N. J.
Presbyterian Hospital, Philadelphia, Pa.
Queens University, Kingston, Ontario, Canada
Rockefeller Institute for Medical Research, New York City
Roosevelt Hospital, New York City

St. Luke's Hospital, New York City
Seovill Manufacturing Company, Waterbury, Conn.
Southern Railway System, Alexandria, Va.
Standard Oil Company, Bayway, N. J., Brooklyn, N. Y., and E. Providence, R. I.
Syracuse University, Syracuse, N. Y.
Tide Water Oil Company, Bayonne, N. J.
Thompson Institute for Plant Research, Yonkers, N. Y.
Toronto University, Toronto, Ontario, Canada
U. S. Department of Agriculture, Washington, D. C.
U. S. Bureau of Chemistry, Washington, D. C.
U. S. Bureau of Standards, Washington, D. C.
U. S. Bureau of Mines, Washington, D. C.
U. S. Customs Service, New York City
U. S. Mints and Assay Offices, New York, Denver, San Francisco
U. S. Navy Department, Washington, D. C.
U. S. War Department, Langley Field, Hampton, Va.
United States Rubber Company, Buffalo, N. Y.
U. S. Steel Corporation, Clairton, Pa.
University of Saskatchewan, Saskatoon, Canada
Vacuum Oil Company, Bayonne, N. J. and Paulsboro, N. J.
Westinghouse Electric & Manufacturing Co., Pittsburgh, Pa.
University of Buffalo, Buffalo, N. Y.
Wilson and Company, Chicago, Ill.
Wooster University, Wooster, Ohio
Yale University, Sterling Laboratory, New Haven, Conn.



Research Laboratory for the fertilizer industries, Wiley and Co., Inc., Baltimore, Md.



Note:—Hoods may be furnished with or without glass partitions; vent hole in collection box may be in top, end, or back.

Standard Specifications for ALBERENE STONE CHEMICAL FUME HOODS

ALL fume hoods shall be constructed entirely of stone and glass, with the exception of the wood sliding sashes and the steel pipe supports on which the superstructure is built. The counter or hood base is supported on H frames that are made of $1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. diameter plain or enameled steel pipe having floor plates at bottom of vertical standards and angle framing around top. The counter or hood base is to be made of 2 in. thick hard and specially selected Alberene Stone. Unless otherwise shown on drawings, all stone in hoods is to be $1\frac{1}{4}$ in. in thickness. Solid stone backs and partitions are to be provided for, as also solid sloping roof. Where light is desired at top or side of hood, clear wire plate glass is to be provided for as shown on drawings. There is to be no metal showing inside of the hood. A stone drip groove is to be provided in the rear of the top lintel over sash opening, and is to deliver drip in rear of the weight

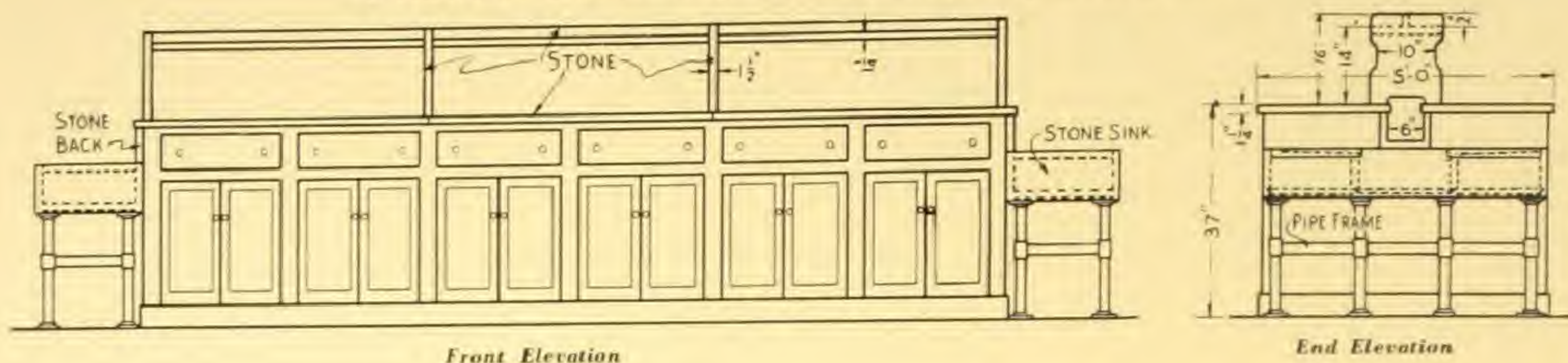
boxes. All exposed faces of stone work to be hone finished.

Sash weights with bronze chains that work over bronze faced pulleys are to be attached to sliding sashes. An apron is to be provided below the counter and in front for the reception of hand wheels that control the varied service piping that will extend inside the hoods.

If cupboards are desired below the hood base, stone lintels and jambs and solid stone ends can be provided. Strapped butts will support cupboard doors. These cupboard doors will be made of enameled sheet steel or wood.

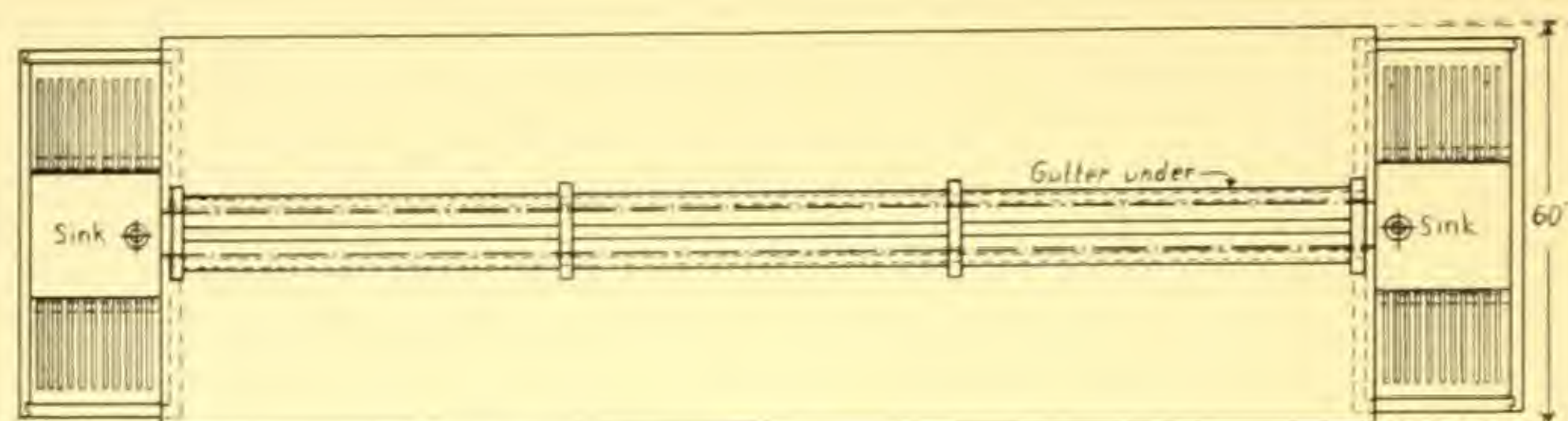
Note—Steam or water bath pans can be attached below the hood counter. A stone cover for pan with top flush with counter top and having six or eight holes cut through cover, can be provided. Pans and sets of cover rings are generally made of Monel Metal. Data on ventilation of hoods will be furnished on request.

Details of Laboratory Tables, Shelving and Sinks



Front Elevation

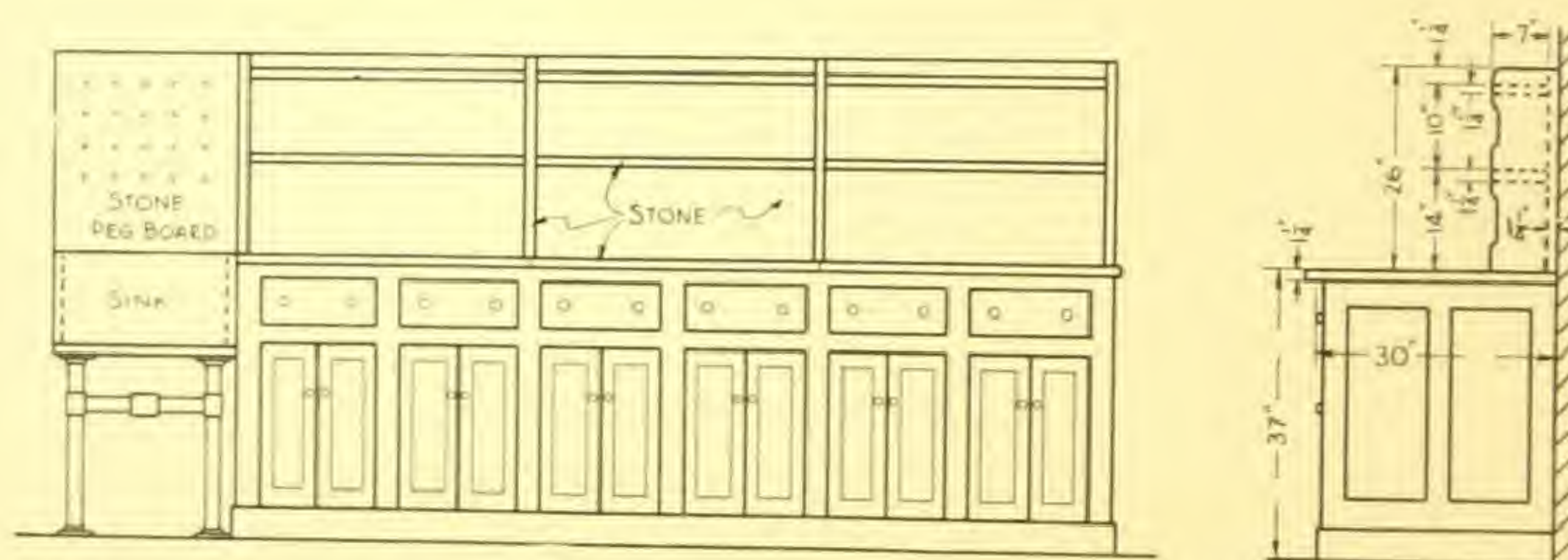
End Elevation



Plan

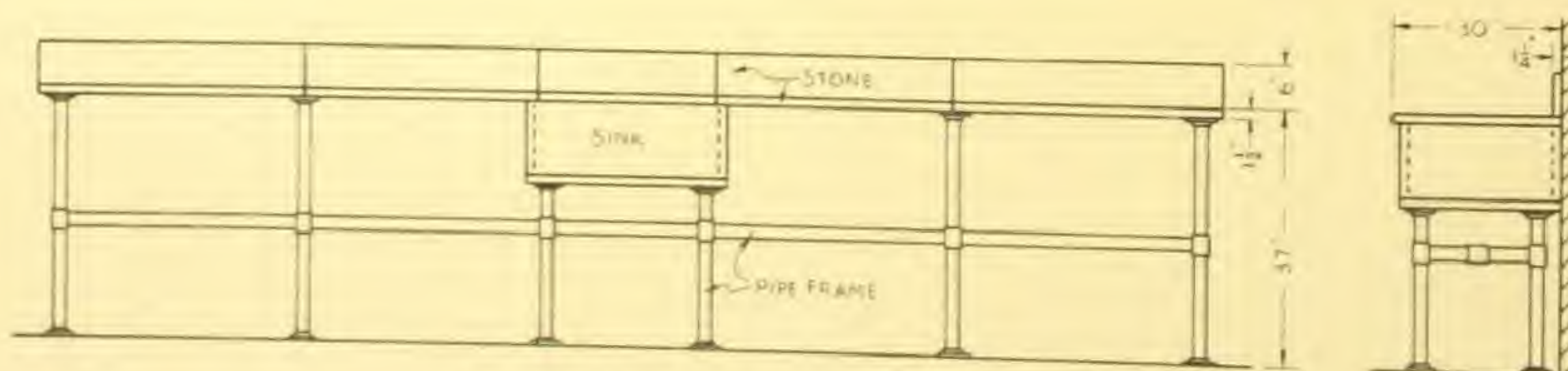
Center Table with Cabinet, Shelving and Sinks

Note:—Tables may be of any length; gutters in center pitch to sinks or other drain outlet; pipe frame supports instead of cabinet may be furnished.



Wall Table with Cabinet, Shelving, Sink and Pegboard

Note:—Sinks may be of any reasonable size and may be at end of, or set in, the table.



Wall Table and Sink with Pipe Supports

Note:—Sinks may be of any reasonable size and may be at end of, or set in, the table.

Standard Specifications for ALBERENE STONE LABORATORY TABLE TOPS

ALBERENE STONE table tops that are to be supported by enameled steel or wood cabinet work are to be $1\frac{1}{4}$ in. in thickness, unless otherwise called for, and provided with a drip groove at front under edge. Stone tops supported by pipe frames to be $1\frac{1}{2}$ in. thick. Pipe supports to be of $1\frac{1}{4}$ in. diameter, plain or enameled steel. All tops or working counters for fume hoods, as also for table tops on which heat work is carried on, to be of 2 in. stone. Joints in table tops shall be made flush and tight by means of metal slip-tongue construction in acid-proof cement. Stone

shelves shall be $1\frac{1}{4}$ in. thick, with stone shelf supports $1\frac{1}{2}$ in. thick. Finish of all exposed faces and edges of tops, high backs and curbs to be hone finish.

Where wall tables are installed across window openings there shall be provided a 4 in. high stone curb around openings above radiators. Provide high backs and high ends against building wall and partitions for all stone wall table tops; thickness to be $1\frac{1}{4}$ in. and height 12 in. unless otherwise specified or shown.

Standard Specifications for ALBERENE STONE LABORATORY SINKS, DRAINBOARDS AND PEGBOARDS

ALL sinks marked "ALBERENE" on drawings shall be constructed of selected stone, suitable for acid work. Sides to be $1\frac{1}{4}$ in. thickness with a flush bottom of $1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. thickness that is grooved to receive sides. Sinks or tanks that are over 36 in. in length or deeper than 12 in. shall have $1\frac{1}{2}$ in. thick sides with 2 in. bottoms. All inside surfaces and top edges of sinks shall be hone finished.

Drainboards or cover slabs for sinks to be $1\frac{1}{2}$ in. thick, of stone selected for acid work and free from veins. Tops of drainboards to be flush, with parallel grooving pitched within thickness of the stone top. High back and high ends that are installed for splash at sinks to be 12 in. in height and $1\frac{1}{4}$ in. thick and to have exposed faces hone finished. In-

tegral high backs for sinks to be 12 in. in height above top of box of sink. Where integral high backs are shown or called for, there will be provided the necessary high ends and also a cover cap above back. Pipe space in rear of high backs to be 3 in. unless otherwise shown on drawing.

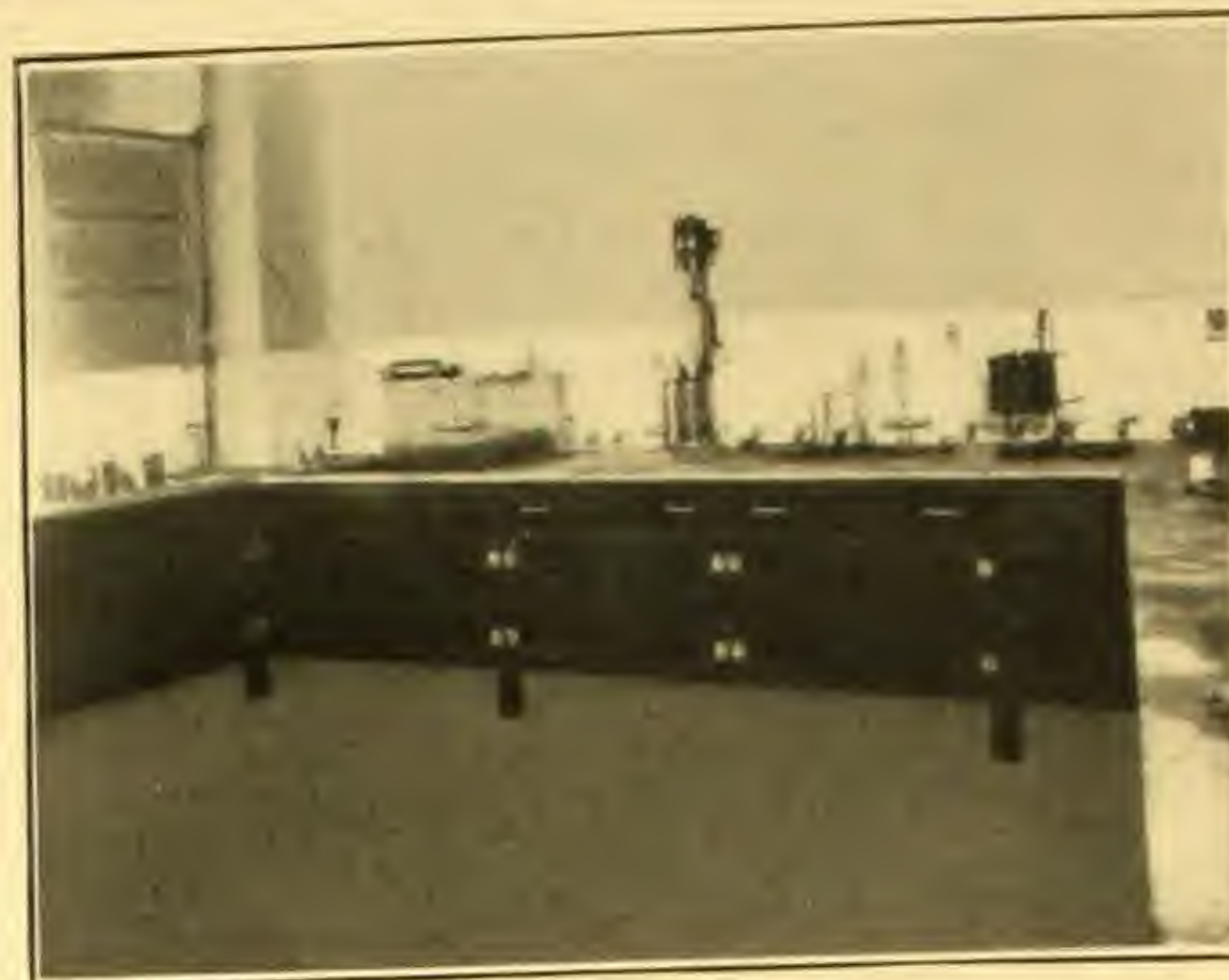
Where peg boards or racks are specified, these stone boards are to be used for peg supports on which glassware is suspended and dried. All exposed faces and edges of peg boards shall be hone finished. Unless otherwise shown on drawings, these stone peg boards are to be 36 in. in height and $1\frac{1}{4}$ in. thick, with holes bored for wooden pegs that will be supplied by contractor for sinks. First row of pegs to be 14 in. from bottom of board.



*A part of the Laboratory of the Colonial Steel Co.,
Colona, Pa.*



*Alberene Stone Fume Hoods, in the laboratory of
Cambria Steel Co., Johnstown, Pa.*



Testing and Research Laboratories of the Brooklyn Edison Co., Brooklyn, N. Y.; Alberene Stone and enameled steel equipment throughout, absolutely fireproof; left, general chemistry laboratory; right, oil testing laboratory.

ALBERENE STONE FLOORS for Acid and Chemical Storage Rooms

Acid and Chemical Storage

The importance of this application of Alberene Stone claims special mention. The chemical-resistant properties of the material itself afford "the first line of defense." And its easy machining qualities, with the methods of construction already described, make it possible to use Alberene Stone not only for shelving, cabinet work, tanks, etc., but also for floor and base and (if necessary) wainscoting—all assembled with chemical-proof, liquid-tight joints which are a positive safeguard against leakage or escape of destructive chemicals. Notable installations of Alberene Stone have been made for this purpose.

Flooring, Base, Trim, etc.

There are conditions, in connection with certain classes of laboratory work, where it is desirable—if not absolutely essential—that the floor of a room be, in effect, an impervious dish capable of holding liquid. This may be needed as protection against corrosive chemicals, accidentally spilled, eating through the floor to a structure beneath. Or it may be that the work carried on in this room requires absolutely germ-proof construction, with provision for washing out with a germ-destroying agent.

Alberene Stone is the one material capable of meeting these requirements and it has been used in large quantities for the purpose. Considered merely as a flooring, it has the corrosion-proof, non-staining, easily cleanable qualities so essential, combined with durability. And its easy machine-ability makes

liquid-tight, germ-proof construction easy, laying with ground joints in a corrosion-proof cement. A "sanitary" base—i.e., one with a curve instead of a corner—is easily machined from Alberene Stone, with an impervious joint to the flooring. When desired, this has been extended upward in the form of a wainscoting of Alberene Stone slabs, still retaining the impervious joints. Door and window trim, sills, plinths, etc., have also been made of this material.

An important consideration in connection with this subject is that the fire hazard is materially reduced by this construction—a fact which is recognized by the Underwriters, in a substantially lower rate for insurance.



U. S. Mint, Denver, Colorado; electrolytic acid refinery, with floors, base, tanks, table tops, etc. of Alberene Stone.

ALBERENE STONE Toilet Partitions

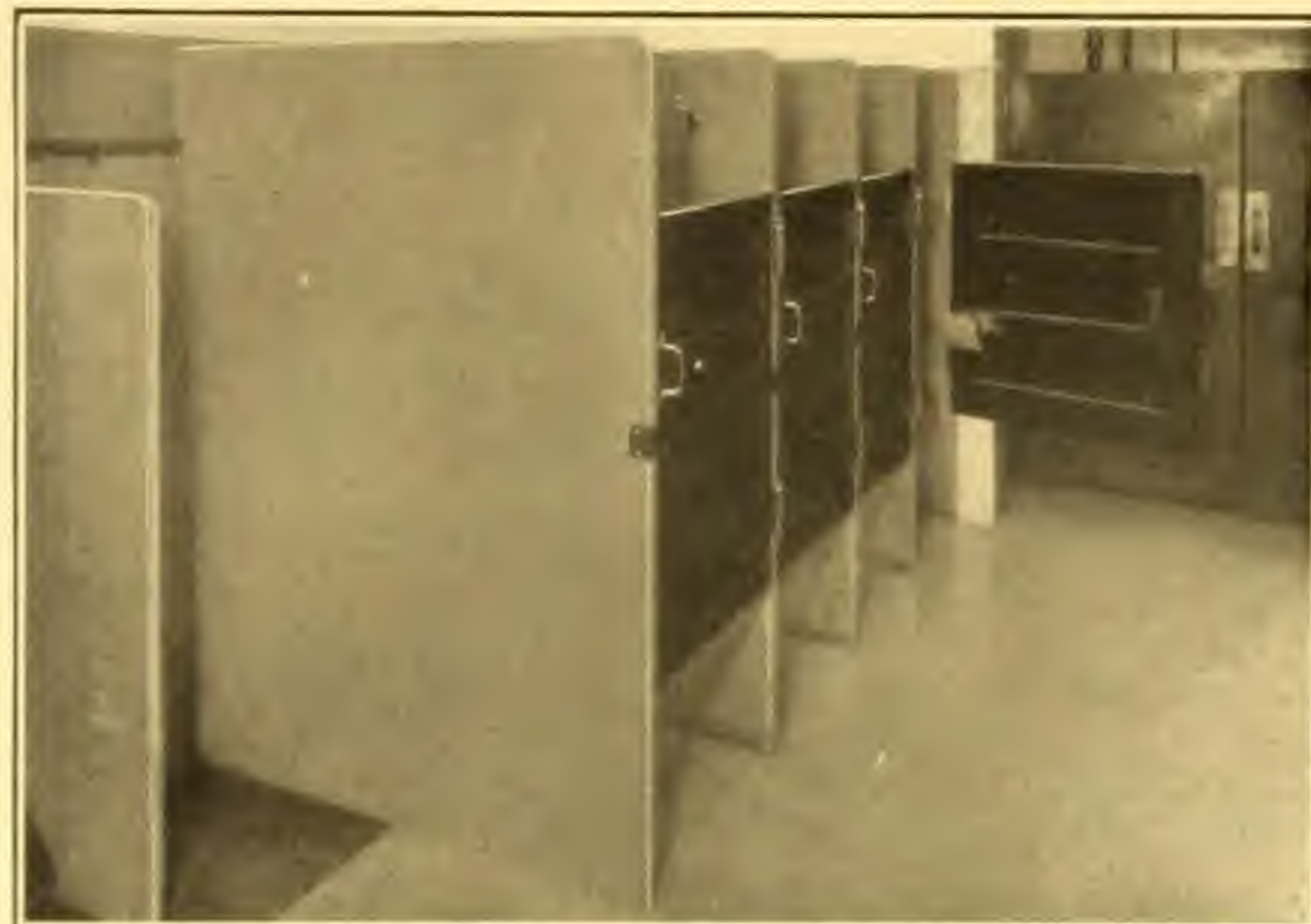
With Jambs

Without Jambs

Practically non-absorbent and non-staining

Sanitary and easily kept clean

Light in color and in harmony with any surroundings



Strong, rigid construction without exposed metal

Assembled and held with concealed bolts and nuts

*High School, Montclair, N. J.
Starrett and Van Vlerk, Architects*

NO material is more suitable, or more serviceable, for toilet partitions than Alberene Stone—a natural stone of superior quality possessing distinctive characteristics which have gained for it a wide recognition in the architectural and building world. In face of the competition of cheaper substitutes, the demand for Alberene Stone shows a steady increase from year to year.

Some Characteristic Features of Superiority

The dense, close grain of Alberene Stone makes it to all intents non-absorbent and stain-proof—qualities especially desirable for the purposes under discussion. It finishes to a fine, smooth surface which is easily cleaned and easily kept clean. Its even texture and the absence of grain or stratification in its natural structure permit fine milling and grooving for interlocking the slabs at joints. This advantage extends to the assembly on the job, where the entire freedom from "shale-ing" or spalling makes possible perfect jointing without broken or chipped corners.

Alberene Stone is normally furnished in slabs measuring up to 4 ft. 6 inches x 6 feet and of any specified thickness.

Because all joints are set up with a waterproof cement, there are no crevices for the lodgement of dirt or a haven for vermin. The light gray color of the stone helps to make a light toilet compart-

ment, and at the same time blends pleasingly with any other material used in surrounding construction. The use of tongue-and-groove and rabbeted joints, and concealed bolts and nuts, insures an exceptionally strong and rigid structure, requiring no overhead bracing.



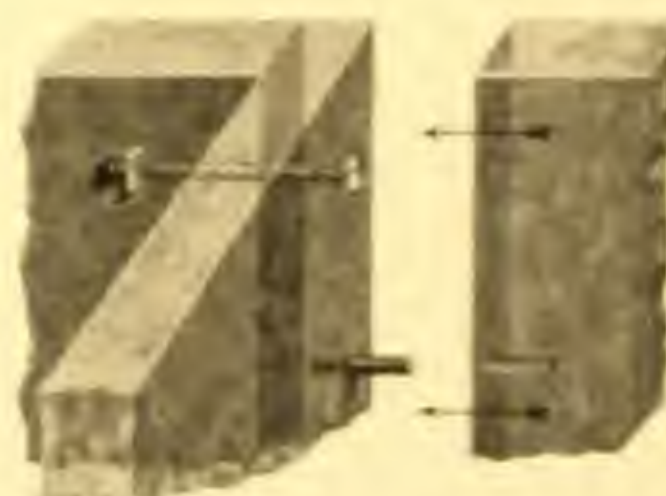
The slip-tongue method of joining Alberene Stone Slabs

Some Notes on Methods of Assembling

Where partition slabs of Alberene Stone are used with a back wall of other material, the slabs are held in position against the wall surface with angle brackets and bolts of nickel-plated brass. It is to be noted, however, that the Alberene

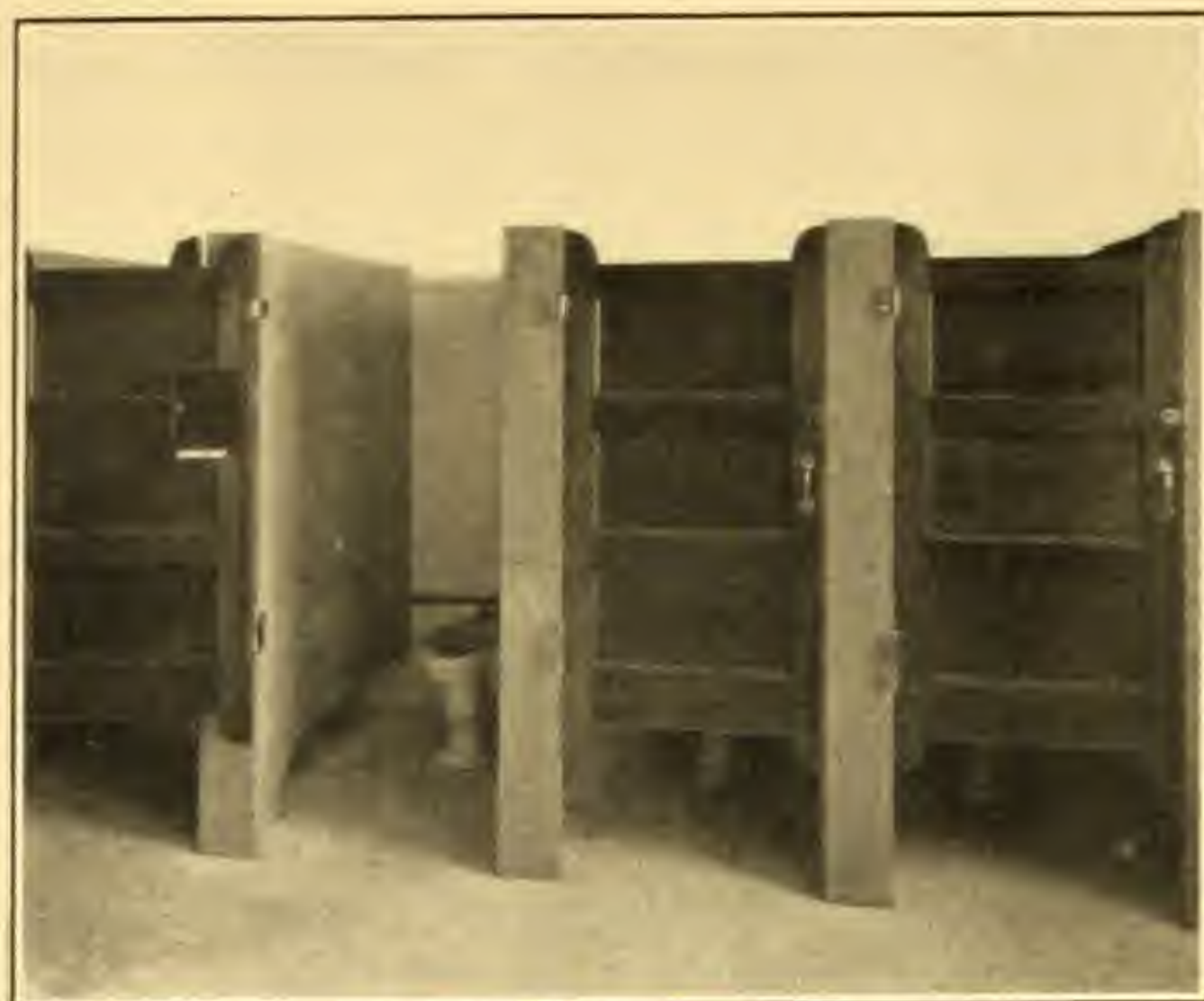
partition slab is made with an integral front leg portion. This obviates the need of using metal supporting legs and overhead bracing, or the use of jambs. The less metal used, the fewer crevices and the more sanitary the construction.

Where the back as well as the sides of the compartment are of Alberene Stone, the assembly where the partition slab is set in between the adjoining



Partition and back slabs are bolted and doweled together

See Reverse of this Page for Specifications and Details



High School, Somerville, N. J.
J. N. Pierson and Son, Architects



Nishuane Junior High School, Montclair, N. J.
Starrett and Van Vleck, Architects

back slabs is made rigid and permanent by bolting the partition to one back slab and setting the second back slab with dowels and waterproof cement. This construction is shown in the illustration on the previous page.

Where wide wall slabs, extended wainscoting or screens are installed, the slabs of Alberene Stone are joined with a "slip tongue" or strip of metal, set and cemented in finely milled grooves in the edges of the slabs, as illustrated on the preceding page. This assembly makes a flush watertight joint, so perfectly finished as to be barely perceptible.

Where a jamb meets an end partition or screen, the joint used is of the tongue-and-groove construction illustrated at the right. This, when set in cement and locked by means of concealed bolts and nuts, is rigid and permanent. Intermediate partitions are rabbeted into the jambs to achieve the same rigidity and tightness of joints.

All joints are made up with a waterproof cement which hardens to the density of the stone. Bolt-head and nut holes are filled with a cement material matching the color of Alberene Stone. We stress the point that no metal is anywhere exposed, except in the type of construction first mentioned. Where stone butts stone, no angles or braces are necessary.



Tongued and grooved joint
used at finished corners



Toilet Room in
Mary G. Dawes Hotel
Chicago, Ill.

Standard Specifications for

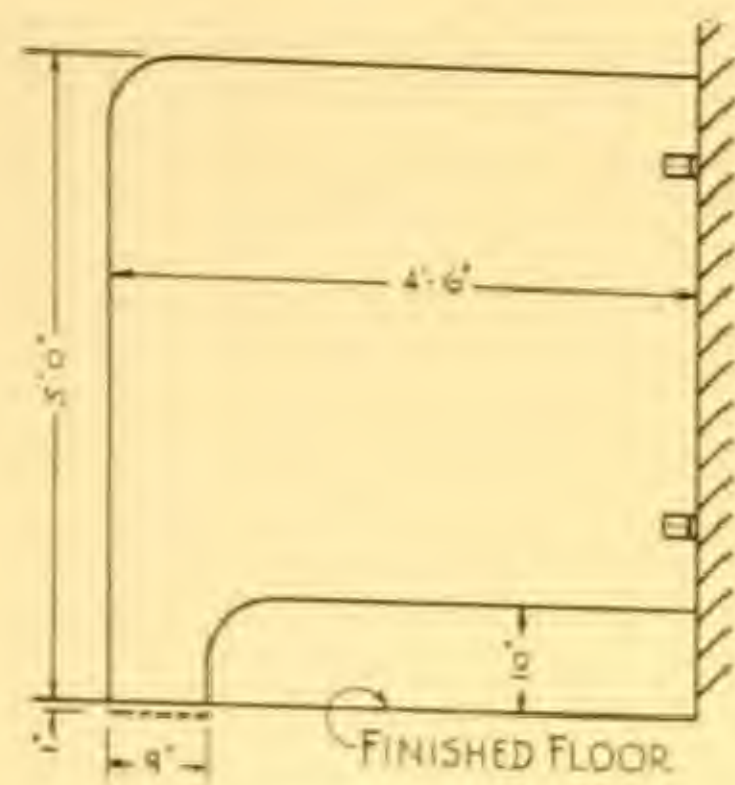
ALBERENE STONE TOILET PARTITIONS

Toilet Partitions:—Water Closet compartments shall be constructed as follows:

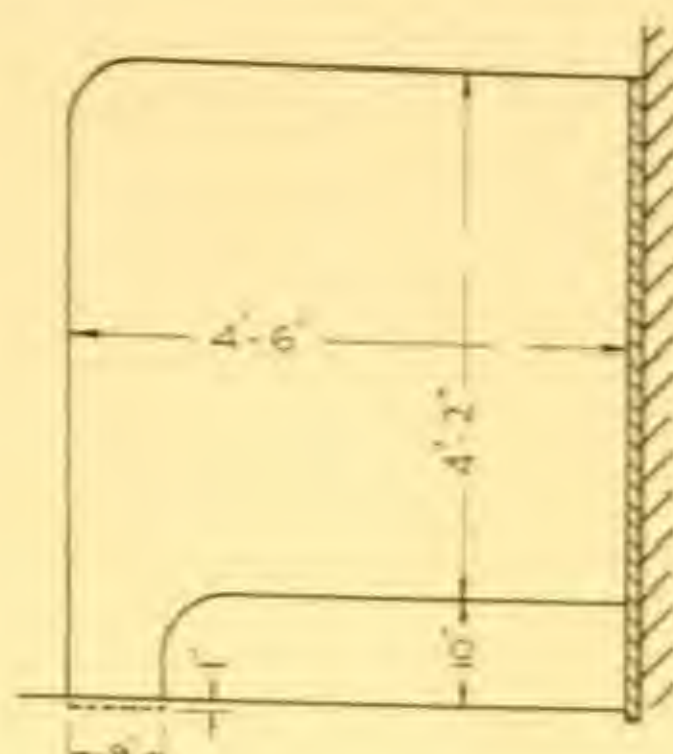
Backs and partitions $1\frac{1}{4}$ " thick, jambs $1\frac{1}{2}$ " (or $1\frac{1}{4}$ ") thick—all Alberene Stone, to finish above floor as shown in details on opposite page.

Partitions to be 4'-6" deep and shall be let into backs and jambs and securely fastened with concealed nuts and bolts. End partitions, backs and jambs shall extend 1" into the floor and intermediate partitions shall be raised 10" off the floor. Where jambs are omitted intermediate partitions shall have a leg 9" wide extending into the floor 1". Leave a 7" pipe space between the wall and back slab and finish same with a cap $1\frac{1}{4}$ " thick and enclosing end pieces where necessary.

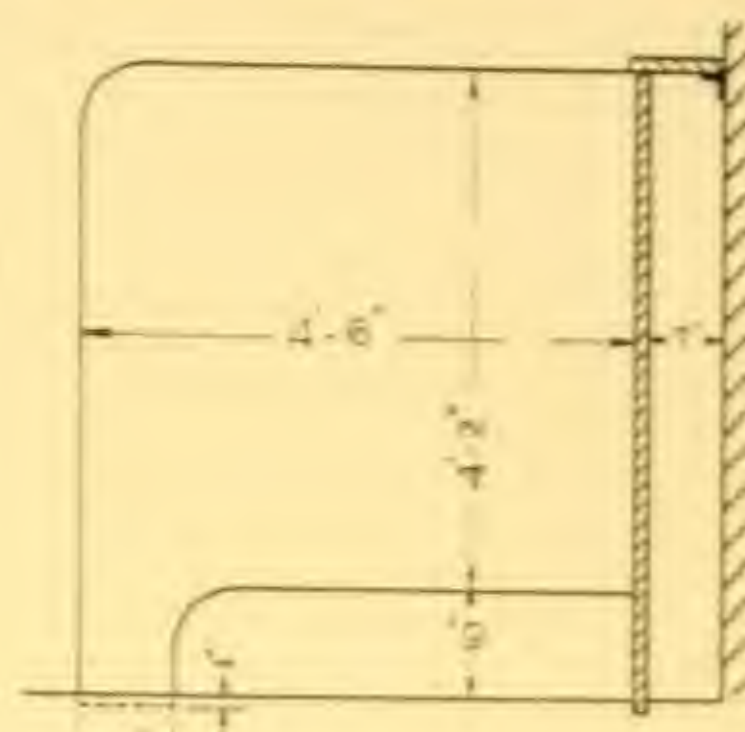
(Note—No overhead bracing or angles are necessary with this construction.)



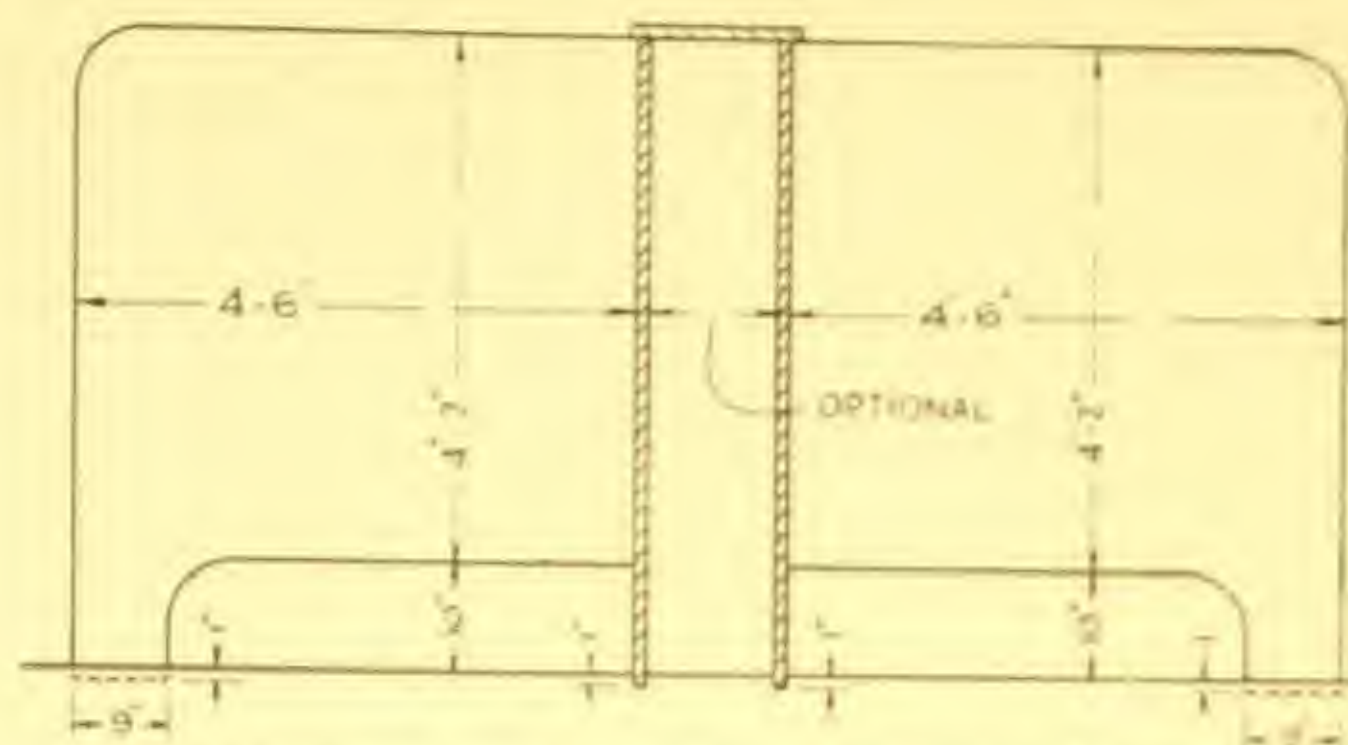
Without Backs



With Back Slab

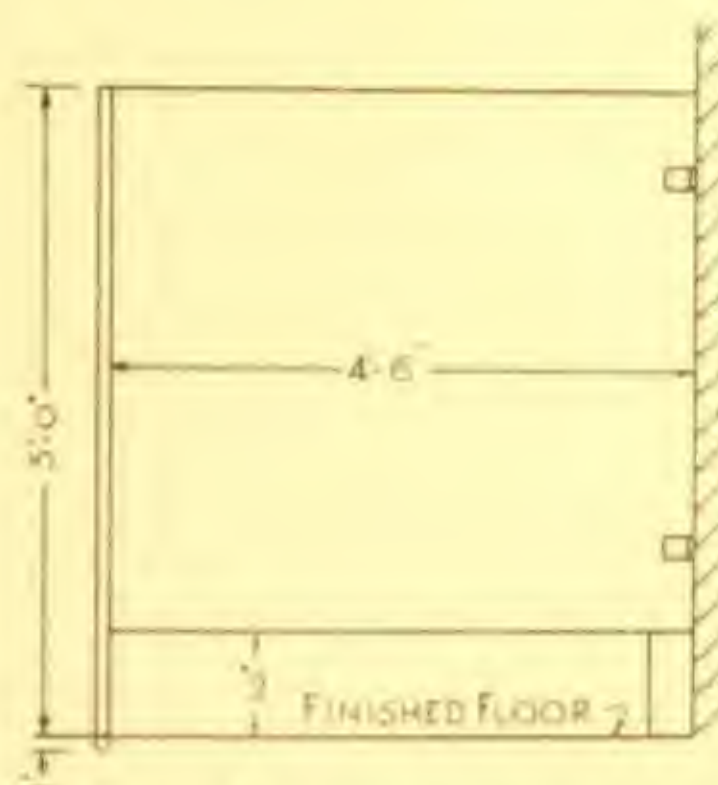


With Pipe Space and Vent at Back

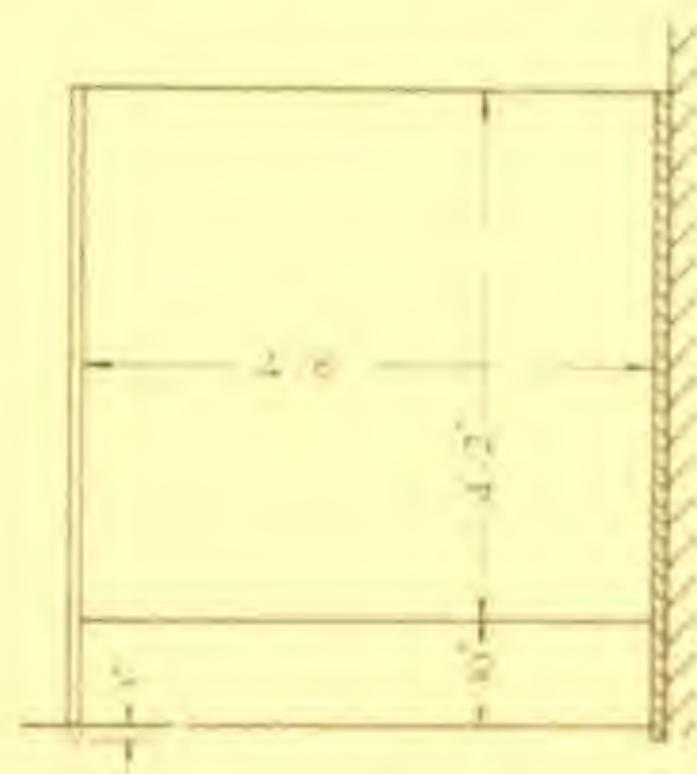


Double Range with Vent Space and Utility Chamber

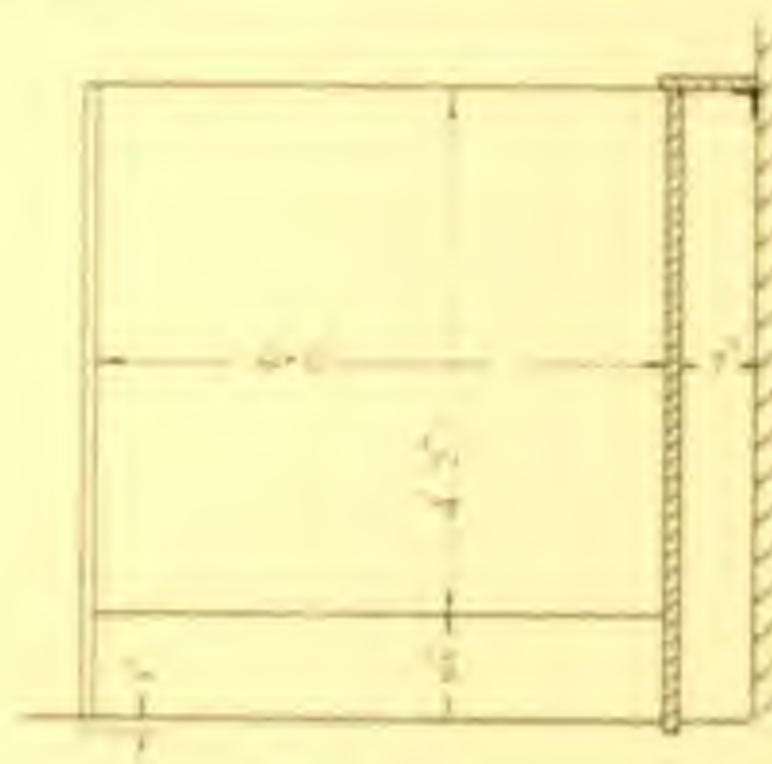
Details—Toilet Partitions without Jambs



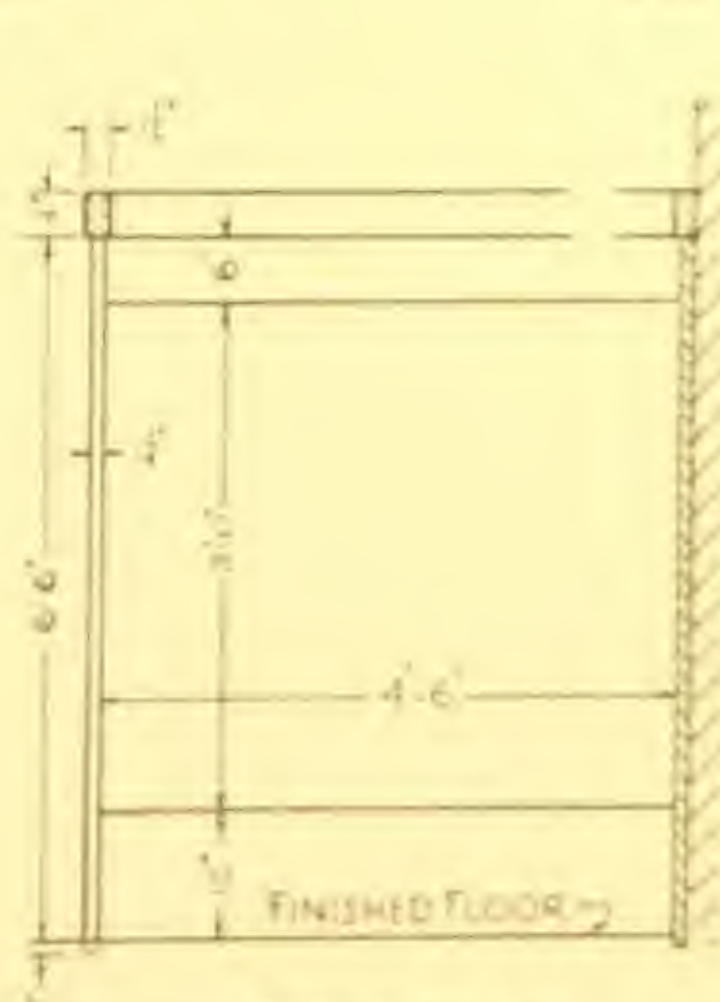
Without Backs



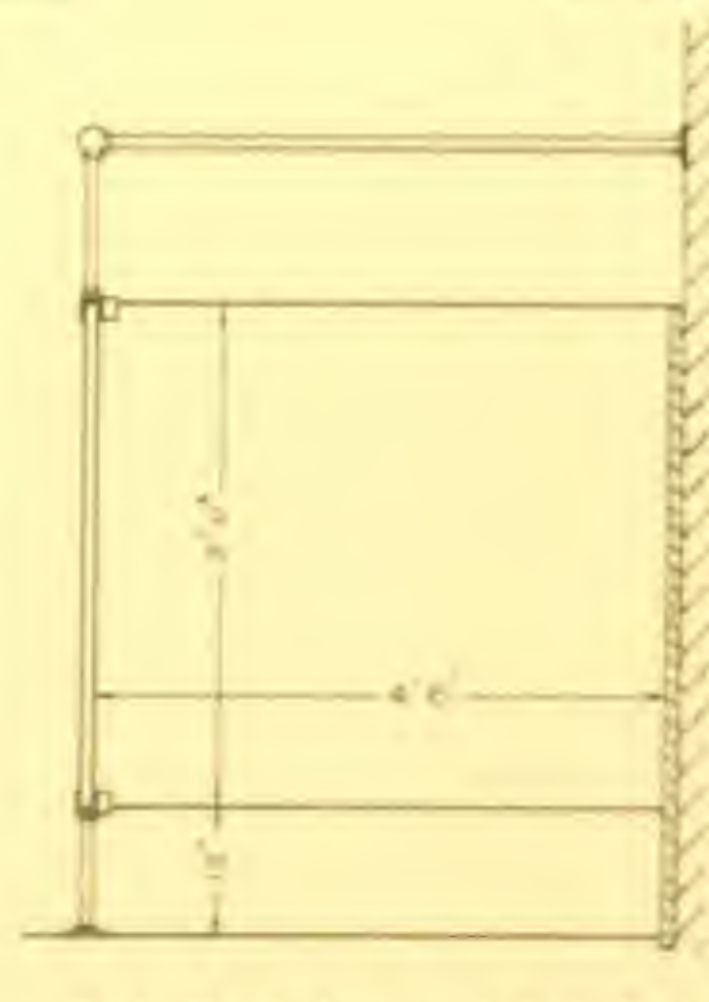
With Back Slab



With Pipe Space and Vent



With Stone Cap



With Metal Legs and Top Rail

Details—Toilet Partitions with Jambs



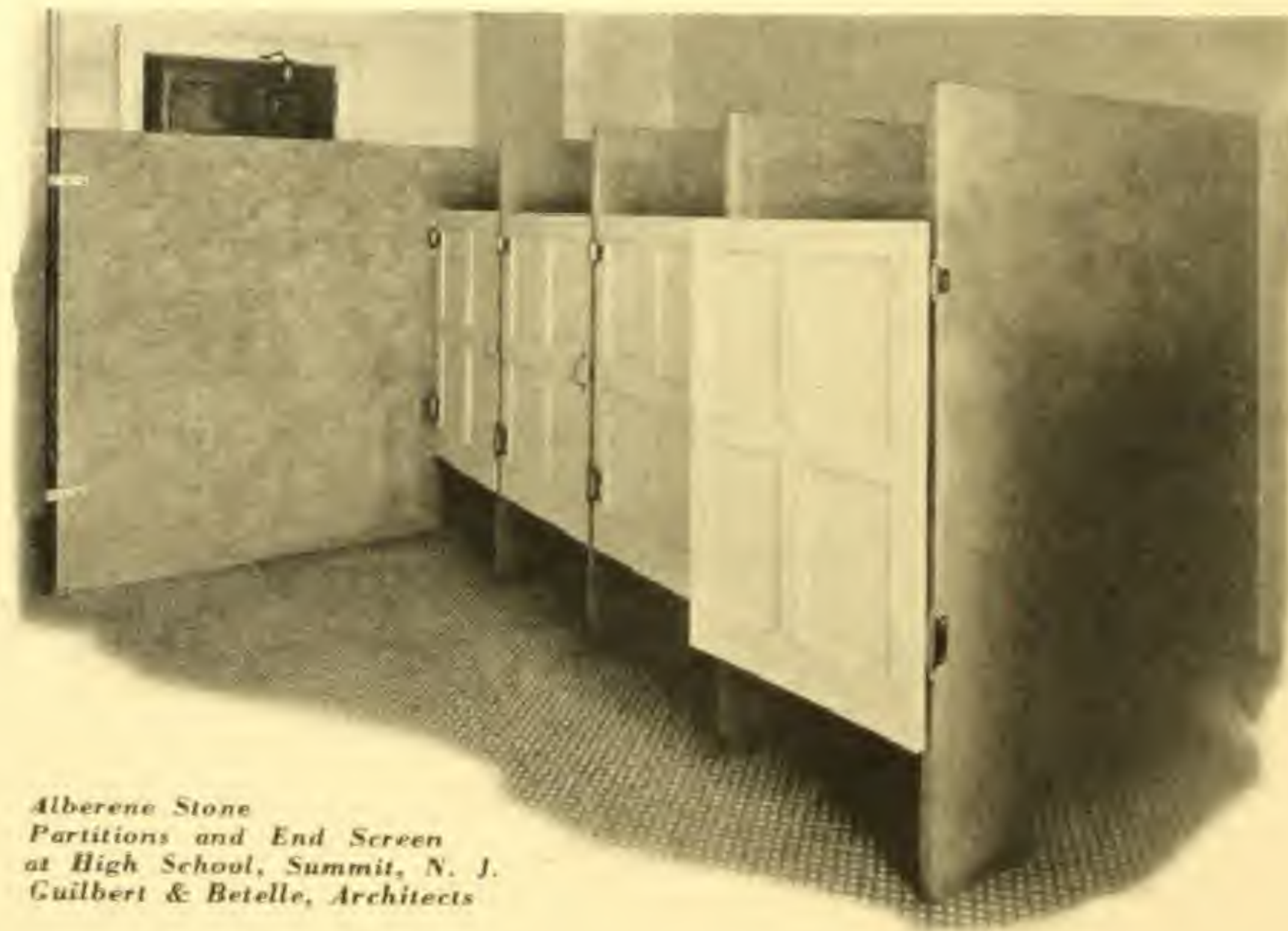
Louisiana Avenue Comfort Station, Baltimore, Md.

A Few Typical Installations

The general character of buildings in which Alberene Stone Toilet Partitions are found, and some of the architects who specify this material, are indicated by the following:

High School, Montclair, N. J. *Starrett & Van Vleck, Architects*
 High School, Summit, N. J. *Guilbert & Betelle, Architects*
 Public School No. 11, Perth Amboy, N. J. *J. N. Pierson & Son, Architects*
 Public School No. 7, Paterson, N. J. *Chas. S. Sleight & Son, Architects*
 Junior High School, Bayonne, N. J. *Donald G. Anderson, Architect*
 Police Stations, Chicago, Ill. *Chas. W. Kallal, Architect*

U. S. Appraisers Stores, Boston, Mass. *Supervising Archt. Treas. Dept., Washington, D. C.*
 Police Stations, New York City *Thos. E. O'Brien, Architect*
 International Harvester Co., Chicago, Ill. *W. D. Price, Architect*
 Memorial School No. 11, Passaic, N. J. *John F. Kelly, Architect*
 High School, Linden, New Jersey *Harold B. Brady, Architect*
 Memorial High School, Pelham, N. Y. *Starrett & Van Vleck, Architects*
 St. Charles Borromeo R. C. School, Newark, N. J. *Wm. T. Fanning, Architect*
 High School, Matawan, New Jersey *John N. Pierson & Son, Architects*
 High School, Morristown, New Jersey *Guilbert & Betelle, Architects*



Alberene Stone
Partitions and End Screen
at High School, Summit, N. J.
Guilbert & Betelle, Architects

ALBERENE STONE Shower Compartments

Practically non-absorbent and stain-proof

Easily kept clean and sanitary

Watertight joints that stay tight

Non-slipping, whether wet or dry



Municipal Baths, Chicago, Ill., Chas. W. Kallal, Architect

Strong, rigid construction without exposed metal

Assembled and held with concealed bolts, nuts and dowels

Light in color, and in harmony with any surroundings

FOR shower compartments Alberene Stone has every desirable quality, coupled with a price which compares favorably with other materials which are lacking in one, or several, important features. A natural quarried product, it is far superior, in all the qualities which make for utility and serviceability, to any artificial substitute for stone or to materials which are absorbent.

Why It Is Better for Shower Compartments

Alberene Stone is a dense, close-grained, non-absorbent soapstone, of a pleasing light gray color that reflects light freely yet is not glaring. It machines to a surface that is smooth without being slippery even when wet, and which is easily kept clean. When assembled according to our standard method of construction, Alberene Stone Shower Compartments are practically one-piece structures, with joints that are permanently water-tight and vermin-proof, and sanitary in the highest degree.

Some Construction Details

Where partition slabs of Alberene Stone abut against a wall of another material, they are held in position with angles and through-bolts of non-corrosive metal. Where the back as well as sides of the compartment are of Alberene Stone, the assembly is by means of concealed bolts and dowels as shown in the sketch herewith—this arrangement being used at top and bottom of the slabs. Where a joint is made between two slabs, at an exposed corner, or where partitions meet a jamb, embedded bolts



Tongue and groove joint at corners

and nuts are used. Partitions, backs and jambs are tongued and set into grooves in the floor slab, which is countersunk and pitched to the waste. All joints are made up with a waterproof cement which hardens to the density of the stone. Bolt-head and nut holes are filled with a material matching the Alberene Stone. No metal is anywhere exposed, except in the one case mentioned above. Seats of Alberene Stone for the dressing compartments afford a complete sanitary installation.

Representative Installations

Among typical examples of Alberene Stone Shower Compartments, the following may be of interest:

- High School, Summit, N. J.
Gulbert & Betelle, Archts.
- Neshaminy Junior High School,
Montclair, N. J.
Starrett & Van Fleet, Archts.
- West Side Baths, Newark,
N. J.
Richard W. Exlee, Archt.
- High School, Harvard, Ill.
J. C. Klemm, Archt.
- High School, Verona, N. J.
Gulbert & Betelle, Archts.
- City of Philadelphia, Municipal
Institution at Bryn Mawr,
Philadelphia, Pa.
P. H. Johnson, Archt.



Method of joining back slabs and partitions

See Reverse of this Page for Specifications and Details



West Side Baths, Newark, N. J.
R. W. Erler, Architect



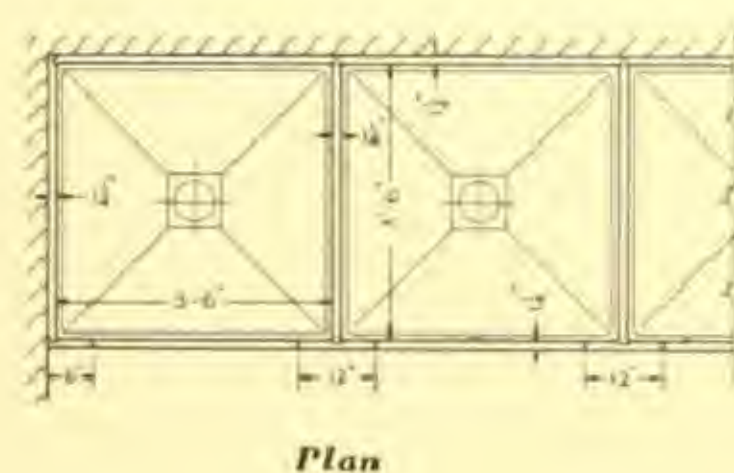
Nishuane Junior High School, Montclair, N. J.
Starrett and Van Vleck, Architects

Standard Specification for

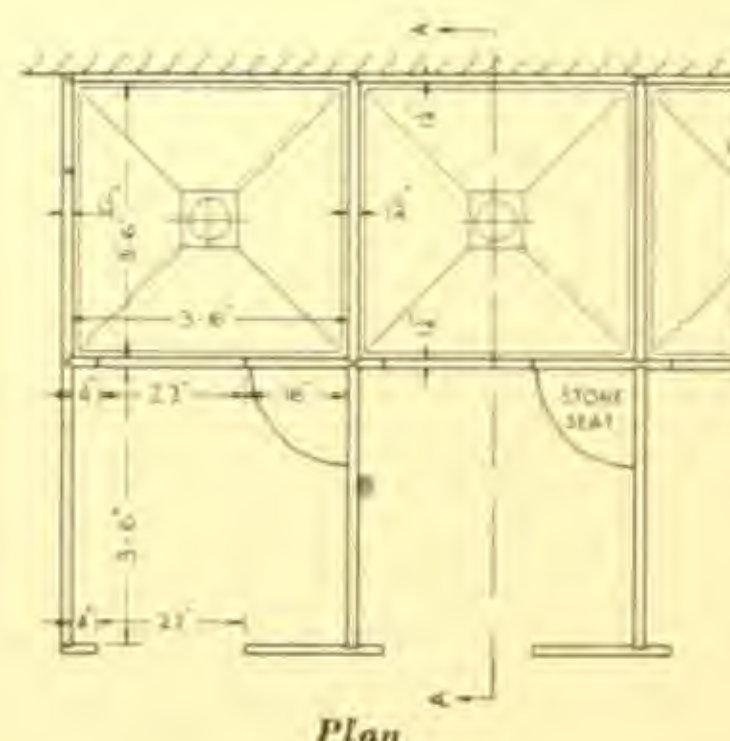
ALBERENE STONE SHOWER COMPARTMENTS

Shower Compartments:—The shower compartments shall be erected where shown on plans. All partitions, jambs, backs and ends to be 6'-0" in height. Shower to be 3'-6" x 3'-6" (and dressing room 3'-6" x 3'-0"). All the joints to be tongued or grooved, or slip tongued, according to the conditions, and made carefully water-tight by the use of litharge and glycerine cement. The sides, back of shower, and jambs shall be tongued and set into the grooves in the floor slab. The floor slab to be of Alberene Stone 2" in thickness, properly countersunk and pitched to the waste. Each shower to be provided with curb. In the dressing room furnish corner seat of Alberene Stone set upon stone cleats. With this construction no superstructure will be required.

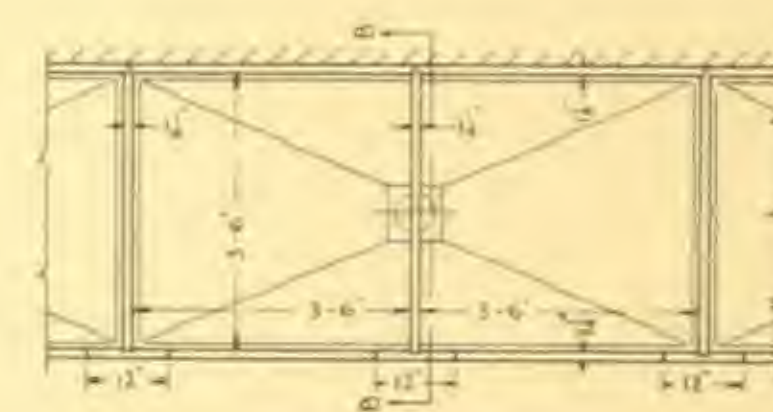
Details



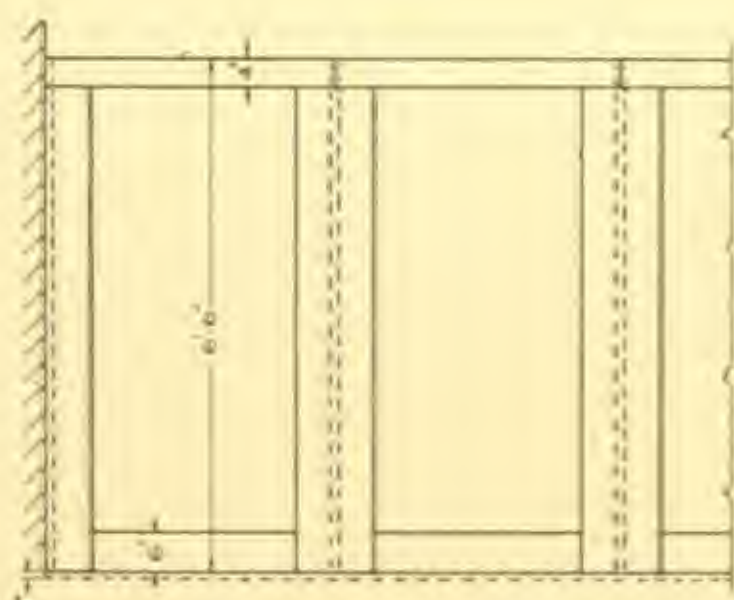
Plan



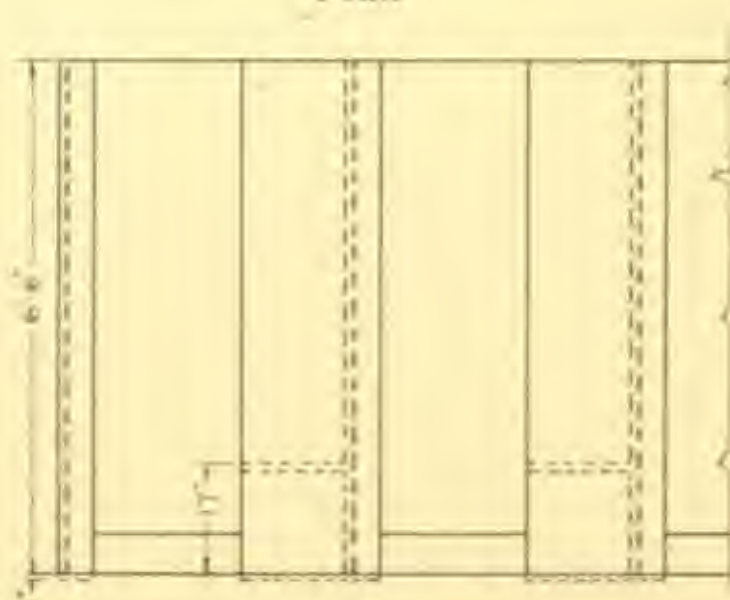
Plan



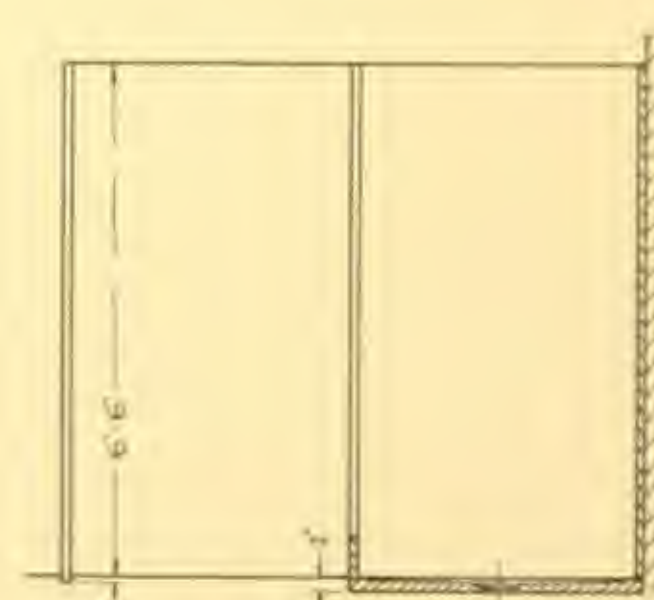
Plan
Two Compartments with Single Drain



Front Elevation
Showers with Cap



Front Elevation
Showers with Dressing Rooms



Section A-A



Section B-B

ALBERENE STONE Stair Treads and Landings

*A safe footing for
hurrying feet*

*Practically non-
absorbent and
easily kept clean*

*Good for a long
life of hard ser-
vice*

*Will neither
chip nor scale in
its lifetime of ser-
vice*



*Light in color and
in harmony with
any other struc-
tural material*

*Specially selected
for hardness*

*Equally non-slip-
ping and non-
sticking whether
wet or dry*

*Equitable Life Assurance Bldg., New York—6290 Alberene Stone Treads
Starrett and Van Vleck, Architects*

THERE is no better material for stair treads and landings than the Alberene Stone which is carefully selected—from the run-of-quarry product—for its hardness and density. The distinctive superiority of these treads explains their steadily increasing use in public buildings, schools, colleges, churches and institutions.

Its Particular Advantages as a Material for Stair Treads

The durability of Alberene Stone for Stair Treads and Landings is evidenced by installations still in serviceable condition after 25 years of use. The considerations of safety and comfort are to be found in the natural surface which is non-slipping and at the same time non-gripping, and which is not affected as to these qualities when wet. Being practically non-absorbent, Alberene Stone Stair Treads are sanitary and easily kept clean. The color—a pleasing light gray—reflects light well and harmonizes with any other material used in the stair construction.

Practical Considerations in Connection with the Use of Alberene Stone Stair Treads and Landings

Because there is no standardization in stair design, it is impracticable to carry Alberene Stone

Stair Treads and Landings in stock. Orders, therefore, should be placed well in advance of delivery date, though our mill capacity and ample supply of uncut stone enable us to make reasonable deliveries in any quantity. Because of the density of the stone, no bolts or dowels are needed in setting Alberene Stone Treads and Landings if a bearing is provided along the edges. Each slab is cut to fit and is bedded in Portland Cement. A large majority of the installations of Alberene Stone Stair Treads are made by our own construction force, whose services are always available to architects and builders.

Some Notable Installations

Without attempting a complete listing, the following are submitted as interesting and recent installations of Alberene Stone Stair Treads.

Equitable Life Assurance Bldg., New York City	Starrett & Van Vleck, Architects
National Chamber of Commerce Bldg., Washington, D. C.	Cass Gilbert, Architect
High School, Kearney, N. J.	Gilbert & Detelle, Architects
High School, Somerville, N. J.	J. R. Pierson & Son, Architects
High School, Montclair, N. J.	Starrett & Van Vleck, Architects
Heywood-Wakefield Co., Chicago, Ill.	
Commercial High School, Bridgeport, Conn.	James Gamble Rogers, Architect

See Reverse of this Page for Specifications and Details



High School, Somerville, N. J.
J. N. Pierson and Son, Architects

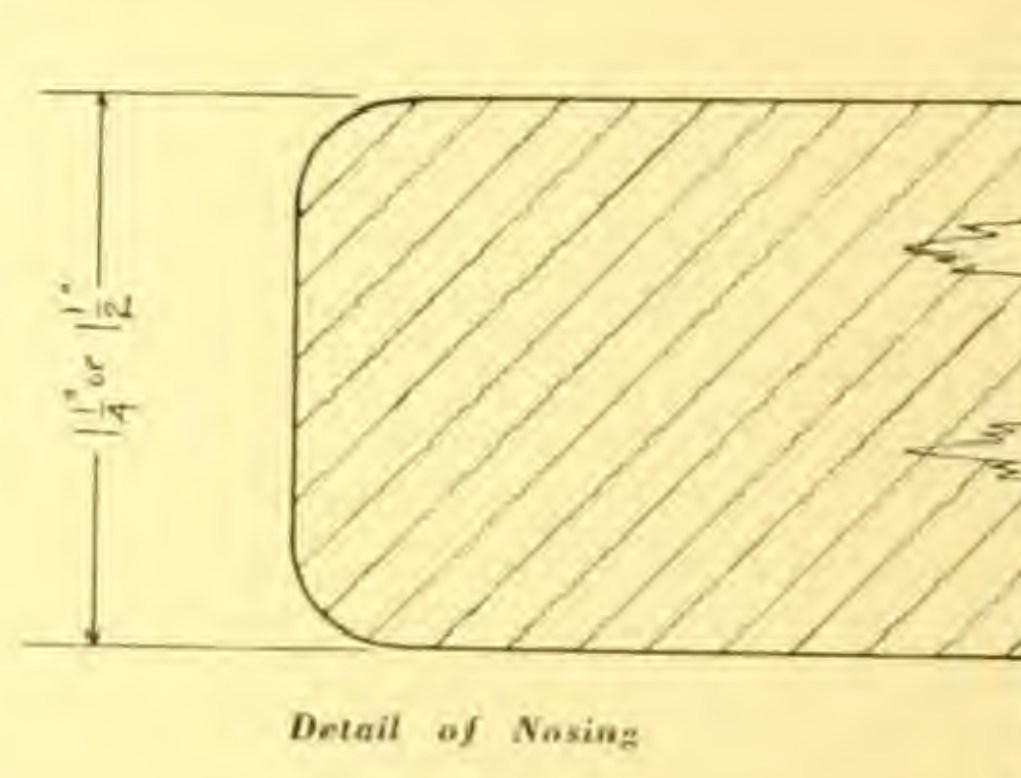


High School, Summit, N. J.
Guilbert and Betelle, Architects

Standard Specification for ALBERENE STONE STAIR TREADS

Stair Treads:—

Treads and platforms (or landing treads at platforms and floor levels) for all stairs except where indicated on plans shall be of hard, close grained Alberene Stone $1\frac{1}{4}$ " thick (or $1\frac{1}{2}$ "). They shall be finished with the proper nosing and all bedded in Portland Cement.

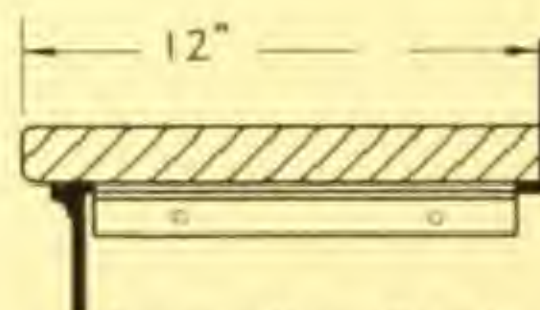


Detail of Nosing

Details



Starting Tread or Floor Border at
Floor Levels



Intermediate Tread



Landing Tread at Floor Level

